

TEST REPORT

**CTK Co., Ltd.**

5 Dongbu-ro 221beon-gil, Cheoin-gu, Yongin-si,
Gyeonggi-do, Republic of Korea
Tel: +82-31-339-9970
Fax: +82-31-624-9501

REPORT No.:

CTK-2025-01323

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1. Applicant

- Name : Hanwha Vision Co., Ltd
- Address : 6 Pangyo-ro 319Beon-gil, Bundang-gu, Seongnam-si,
Gyeonggi-do, 13488 Republic of Korea
- Date of Receipt : Apr. 08, 2025

2. Manufacturer

- Name : Hanwha Vision Co., Ltd

3. Use of Report :

Quality control

4. Test sample / Model :

Cabinet / SBP-050NBW

5. Date(s) of test :

Apr. 09, 2025~ Apr. 16, 2025

6. Test Standard (Method) used :

NEMA 250-2014

Enclosures for Electrical Equipment (1000 Volts Maximum)

7. Testing Environment :

Temperature: (25 ±10) °C, Humidity: (50 ±25) % R.H.

Pressure: (96 ±10) kPa

8. Test Results :

Refer to the test results

9. Location of Test :☒ Permanent Testing Lab ☐ On Site Testing

(5 Dongbu-ro 221beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Republic of Korea)

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This report cannot be reproduced or copied without the written consent of CTK.

Approval	Tested by	Technical Manager
	Name: HyungUk Jeon (Signature) 	Name: HoHyun Lee (Signature) 

Remark. This report is not related to KOLAS accreditation and relevant regulation.

May. 20, 2024

CTK Co., Ltd.

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1. Testing laboratory

1.1 Testing laboratory information

Lab. Name	CTK Co., Ltd.
Representative	Young Joseph Seungwon
Address	5 Dongbu-ro 221beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Republic of Korea
Tel.	+82-31-339-9970
Fax.	+82-31-624-9501
E-Mail	all.youngin@element.com
Website	www.elementkorea.kr

1.2 Testing laboratory accreditation status

Country	Classification	Accreditation Number	Logo
International	KOLAS	TESTING NO. KT119	

2. Product description and equipment information

2.1 Product description

Product Name	Model Name	Quantity	Comment
Cabinet	SBP-050NBW	1 EA	—

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2.2 Manufacturer information

Test item description : Cabinet

Trade Mark :



Manufacturer : Lot O-2, Que Vo Industrial Zone extended area, Nam Son commune, Bac Ninh city, Bac Ninh province, Vietnam

Model/Type reference : SBP-050NBW

Dimension:

200 mm, 200 mm, 290 mm, 290 mm, Ø25*3 by 235.5 mm,

Ø22 by 69.08 mm, Ø 23 mm by 72.22 mm

List of Attachments (including a total number of pages in each attachment):

Attachment 1: 15-17 pages (Construction Diagram including installation method)

Attachment 2: 18-19 pages (Parts List)

Attachment 3: 21-23 pages (photographs)

Summary of testing:Tests performed (name of test and test clause):
Clause 5.7(Hose Down Test)**Testing location:**

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Copy of marking plate: The artwork above may be only a draft.

SBP-050NBW

CABINET



M/C : SBP-050NBW/VEX



S/N : ZVTS6V4Y300001B

FW

MAC. - - - - -

MADE IN VIETNAM

PAT. <https://www.hanwhavision.com/patent/>

CABINET

SBP-050NBW

M/C: SBP-050NBW/VEX



Mar 2025 S/N: ZVTS6V4Y300001B

HANWHA VISION CO., LTD.

MADE IN VIETNAM

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2.3 Equipment information

Testing equipment	Model Name	Manufacturer	Manufacturing Number	Next Cal. Date
25.4mm Nozzle	S3-IP18	CTK	S3-IP18	-
Temperature & Humidity Chamber	TH-GA-408	JEIO TECH	X110169	Aug.23,2025
Area flow meter	Z-6504	FLOWTECH	229400	Jan.16,2026
Steel measuring meter	5.5 m	KOMELON	225851	Jan.16,2026
Stop Watch	NONE	Casio	612Q01R-1	Jan.15,2027
Digital Vernier Calipers	100 mm	MITUTOYO	A17179462	-



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2.4 Pre-test product images

2.4.1 Test sample



Top



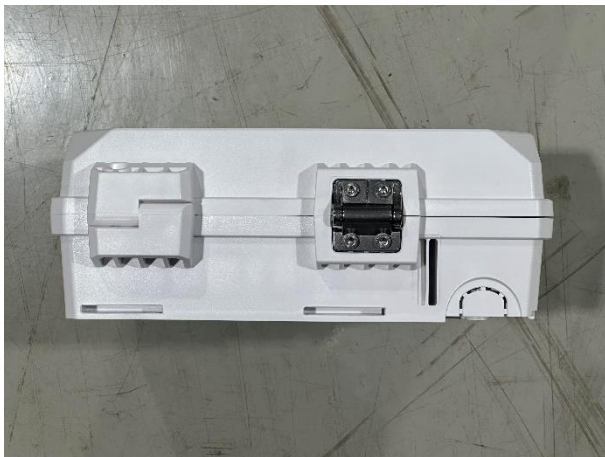
Bottom



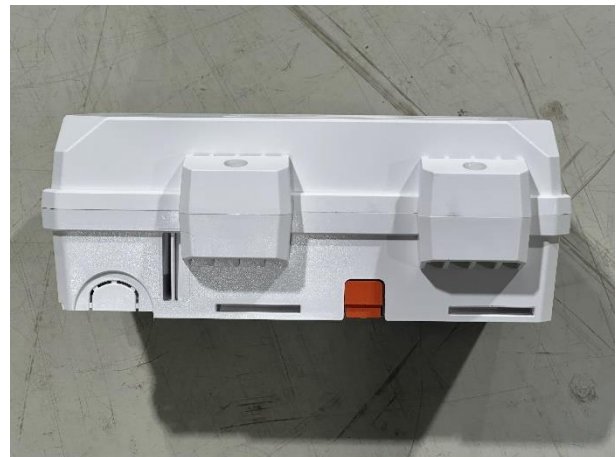
Front



Rear



Left side



Right side



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2.5 Testing equipment images

2.5.1 Test equipment



25.4mm Nozzle



Temperature & Humidity Chamber



Area flow meter



Steel measuring meter



Stop Watch



Digital Vernier Calipers

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3. Test Information

3.1 Test item particulars and Possible test case verdicts

Test item particulars	Cabinet
Classification of installation and use	Outdoor (Watertight/Corrosion Resistant)
Possible test case verdicts:	
- test case does not apply to the test object	N/A
- test object does meet the requirement.....	P (Pass)
- test object does not meet the requirement	F (Fail)
- test case does not evaluate to the test object:	N/E

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3.2 General remarks and factory information

General remarks:

"(See Enclosure #)" refers to additional information appended to the report.

"(See appended table)" refers to a table appended to the report.

Throughout this report a ☐ comma / ☒ point is used as the decimal separator.

Clause numbers between brackets refer to clauses in NEMA 250-2014

Name and address of factory (ies):

1. HANWHA VISION VIETNAM COMPANY LIMITED

Lot O-2, Que Vo Industrial Zone extended area, Nam Son ward, Bac Ninh city, Bac Ninh province,
Vietnam

2. D-TECH CO., LTD.

173-25, Saneop-ro, Gwonseon-gu, Suwon-si, Gyeonggi-do, Korea (Suwon Industrial Complex)



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3.3 Type 4X Test information

Type 4X

Enclosures constructed for either indoor or outdoor use to provide a degree of protection to personnel against access to hazardous parts; to provide a degree of protection of the equipment inside the enclosure against ingress of solid foreign objects (falling dirt and windblown dust); to provide a degree of protection with respect to harmful effects on the equipment due to the ingress of water (rain, sleet, snow, splashing water, and hose directed water); that provides an increased level of protection against corrosion; and that will be undamaged by the external formation of ice on the enclosure.

Table 2-1
Comparison of Specific Applications of Enclosures for Indoor Nonhazardous (Unclassified) Locations

Provides a Degree of Protection against the Following Conditions	Type of Enclosure									
	1	2	4	4X	5	6	6P	12	12K	13
Access to hazardous parts	X	X	X	X	X	X	X	X	X	X
Ingress of solid foreign objects (falling dirt)	X	X	X	X	X	X	X	X	X	X
Ingress of water (dripping and light splashing)	...	X	X	X	X	X	X	X	X	X
Ingress of solid foreign objects (circulating dust, lint, fibers, and flyings **)	...	...	X	X	...	X	X	X	X	X
Ingress of solid foreign objects (settling airborne dust, lint, fibers, and flyings **)	...	...	X	X	X	X	X	X	X	X
Ingress of water (hosedown and splashing water)	...	...	X	X	...	X	X	...	...	...
Oil and coolant seepage	...	...	...	...	...	...	...	X	X	X
Oil or coolant spraying and splashing	...	...	...	...	...	...	...	...	...	X
Corrosive agents	...	...	...	X	...	...	X	...	...	...
Ingress of water (occasional temporary submersion)	...	...	...	...	...	X	X	...	...	...
Ingress of water (occasional prolonged submersion)	...	...	...	...	...	...	X	...	...	...

** These fibers and flyings are not considered Class III type ignitable fibers or combustible flyings. For Class III type ignitable fibers or flyings see the *National Electrical Code*®, Article 500.5(D).

Table 2-2
Comparison of Specific Applications of Enclosures for Indoor & Outdoor Nonhazardous (Unclassified) Locations

Provides a Degree of Protection Against the Following Conditions	Type of Enclosure									
	3	3X	3R	3RX	3S	3SX	4	4X	6	6P
Access to hazardous parts	X	X	X	X	X	X	X	X	X	X
Ingress of solid foreign objects (falling dirt)	X	X	X	X	X	X	X	X	X	X
Ingress of water (dripping and light splashing)	X	X	X	X	X	X	X	X	X	X
Ingress of water (rain, snow, and sleet **)	X	X	X	X	X	X	X	X	X	X
Sleet ***	...	...	...	...	X	X	...	...	...	...
Ingress of solid foreign objects (windblown dust, lint, fibers, and flyings****)	X	X	...	...	X	X	X	X	X	X
Ingress of water (hosedown and splashing water)	...	...	...	...	...	...	X	X	X	X
Corrosive agents	...	X	...	X	...	X	...	X	...	X
Ingress of water (occasional temporary submersion)	...	...	...	...	...	...	...	...	X	X
Ingress of water (occasional prolonged submersion)	...	...	...	...	...	...	...	...	...	X

** External operating mechanisms are not required to be operable when the enclosure is ice covered.

*** External operating mechanisms are operable when the enclosure is ice covered. See subsection 5.6.

**** These fibers and flyings are not considered Class III type ignitable fibers or combustible flyings. For Class III type ignitable fibers or flyings see the *National Electrical Code*®, Article 500.5(D).

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Table 5-1A
Degrees of Protection Against Access to Hazardous Parts

Enclosure Type	Test Conditions	Degree of Protection		Corresponding IP First Characteristic Numeral
		Brief Description	Definition	
4X	5.7	Protected against access to hazardous parts with a wire	An access probe of 1.0 mm shall not penetrate	6

Table 5-1B
Degrees of Protection Against Solid Foreign Objects

Enclosure Type	Test Conditions	Degree of Protection		Corresponding IP First Characteristic Numeral
		Brief Description	Definition	
4X	<u>Non-vented</u> 5.7	Windblown dust protected	No ingress of dust	6
	<u>Vented</u> 5.5.1 Dust Blast Method			

Table 5-1C
Degrees of Protection against Water

Enclosure Type	Test Conditions	Degree of Protection		Corresponding IP Second Characteristic Numeral
		Brief Description	Definition	
4X	5.7	Protected against hose directed water	Water projected against the enclosure in any direction shall not enter	6 No Ingress Allowed*

Table 5-1D
Additional Protection

Enclosure Type	Test Conditions	Additional Protection		Corresponding IP Second Characteristic Numeral
		Brief Description	Definition	
4X	5.6 5.9 5.10	Special corrosion protection and undamaged by the external formation of ice	Enclosure provides increased corrosion protection and is not damaged by ice that forms on the outside	None

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3.4 NEMA 250-2014 Test list

NEMA 250-2014			
Clause	Requirement + Test	Result – Remark	Verdict
3	CONSTRUCTION		
3.1	General		P
3.2	Units of Measurement		P
3.3	Materials-General	Enclosures are made of metal or polymeric materials	P
3.4	Materials-Polymeric	More than 650 mm ² (1 in ²) in area Polymeric Materials used is declared as Min. V-2 Used to UL certified material. (See the attachment 2)	N/E
3.5	Corrosion Protection	Stainless steel and/or aluminium are declared as the materials used (See the attachment 2)	N/E
3.6	Openings	No openings in Product	N/A
3.7	Mounting	Mounting means are external to the equipment cavity (See the attachment 1)	P
3.8	Conduit Connection	No conduit connection (See the attachment 1)	N/A
3.9	Hubs and Fittings	No Hubs and Fittings	N/A
3.10	Knockouts	See the Attachment 1	P
3.11	External Operating Mechanisms	No External Operating Mechanisms	N/A
3.12	Access to Interior	Needs tool to open unit	P
3.13	Closing Hardware	No closing Hardware	N/A

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NEMA 250-2014

Clause	Requirement + Test	Result – Remark	Verdict
3.14	Gaskets	Gaskets made of a silicone Sponge Rubber (no Elastomeric or Thermoplastic used) (See clause 5.14 and the attachment 2)	P
3.15	Observation Windows	No Observation Window	N/A

4	MARKING		
4.1	Type Designations	“Type 4X” Marking is declared to be on the product before on the market	P
4.2	Supplemental Markings	Supplemental Marking (watertight/corrosion resistant) is declared to be used when it is on the market. The required marking shall be added on the product)	P
4.3	Location of Markings	See the Attachment 3	P
4.4	Enclosure Orientation	No Particular Mounting Orientation	N/A
4.5	Conduit Hubs and Closure Plates	No Conduit Hubs and Closure Plates	N/A
4.6	Equipment Openings	No Openings on Unit	N/A
4.7	Drainage Openings	No Drain Openings	N/A

5	DESIGN TESTS		
5.1	General	See Table 5-1A to 5-1D and 5.1.5 in the General product information	P
5.2	Tests For Protection Against Access to Hazardous Parts	Rated 4X	N/A
5.3	Tests for Protection Against Ingress of Water (Dripping and Light Splashing)	Rated 4X	N/A

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NEMA 250-2014

Clause	Requirement + Test	Result – Remark	Verdict
5.4	Tests for Protection Against Ingress of Water (Rain)	Rated 4X	N/A
5.5	Tests for Protection Against Ingress of Solid Foreign Objects (Setting Airborne Dust, Lint, Fibers, And Flings)	Non-vented (See clause 5.7)	N/A
5.6	External Icing Test	No external cavities to trap water when mounted in the normal position.	N/A
5.7	Tests for Protection Against Ingress of Water (Hosedown)	No entry of water See the test information	P
5.8	Indoor Corrosion Protection (Rust-Resistance Test (24-Hour Salt Spray Test))	See clause 3.5	N/E
5.9	Outdoor Corrosion Protection	See clause 3.5	N/E
5.10	Corrosion Protection-Type 3X, 3RX, 3SX, 4X Or 6P Enclosures	See clause 3.5	N/E
5.11	Test for Protection Against Ingress of Water (Temporary Submersion)	Rated 4X	N/A
5.12	Test for Protection Against Ingress of Water (Prolonged Submersion)	Rated 4X	N/A
5.13	Oil Exclusion Test	Rated 4X	N/A
5.14	GASKET MATERIAL TESTS	The product itself(including gaskets) was conditioned at 70 °C for 168 hrs according to 5.14.3(Alternate Evaluation) before performing relevant required tests.	P
5.15	Test for Sharpness of Edges	No sharp edges	P



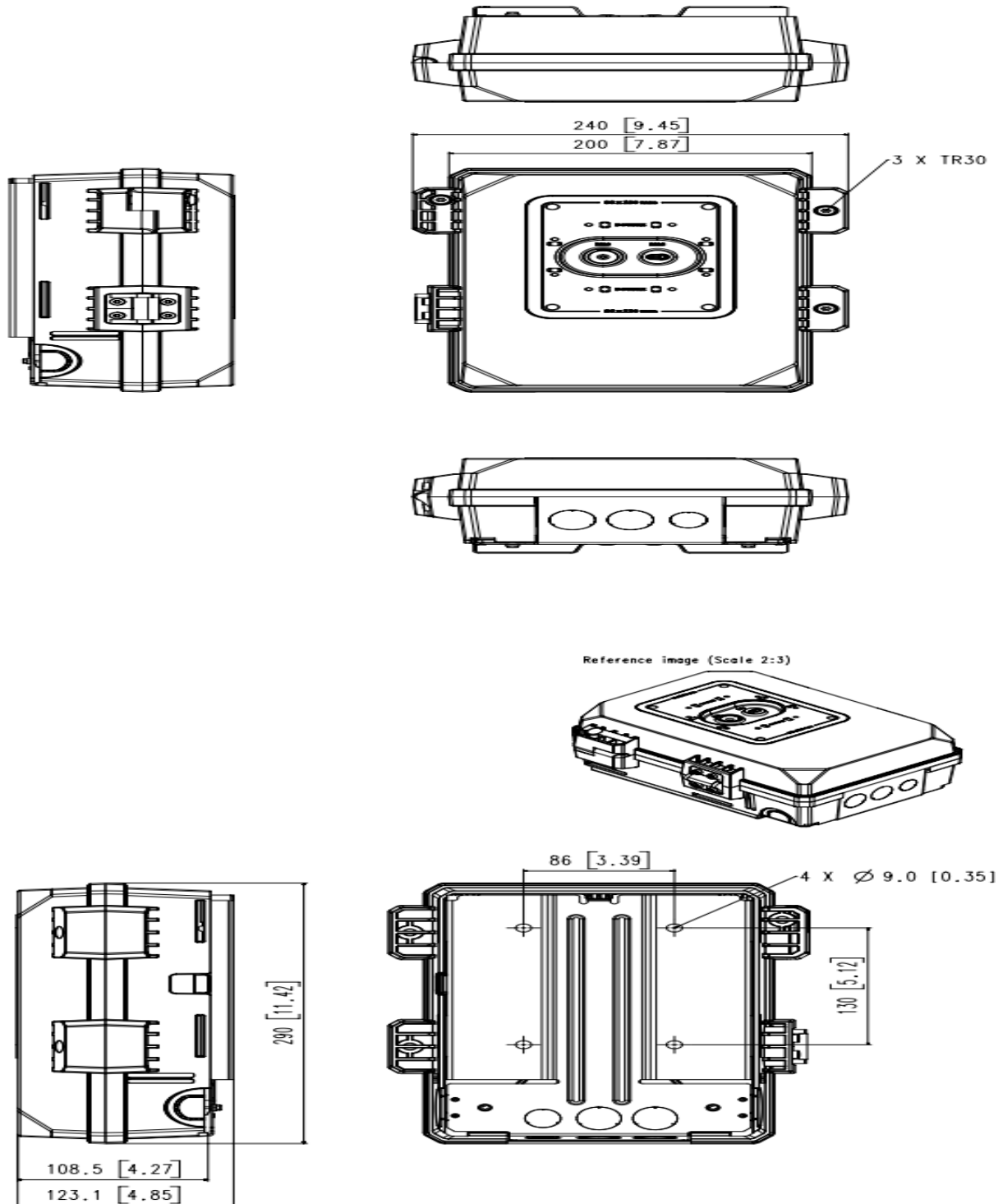
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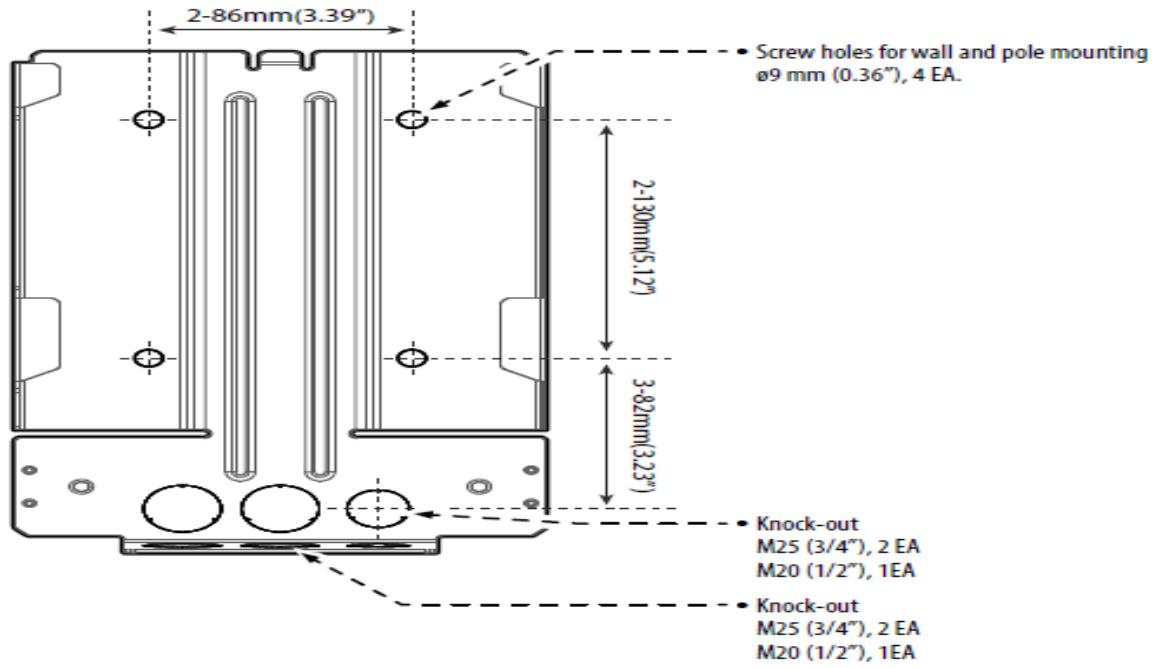
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3.5 Attachment 1 - Construction Diagram and installation method

3.5.1 Construction Diagram (1)



3.5.2 Construction Diagram (2)



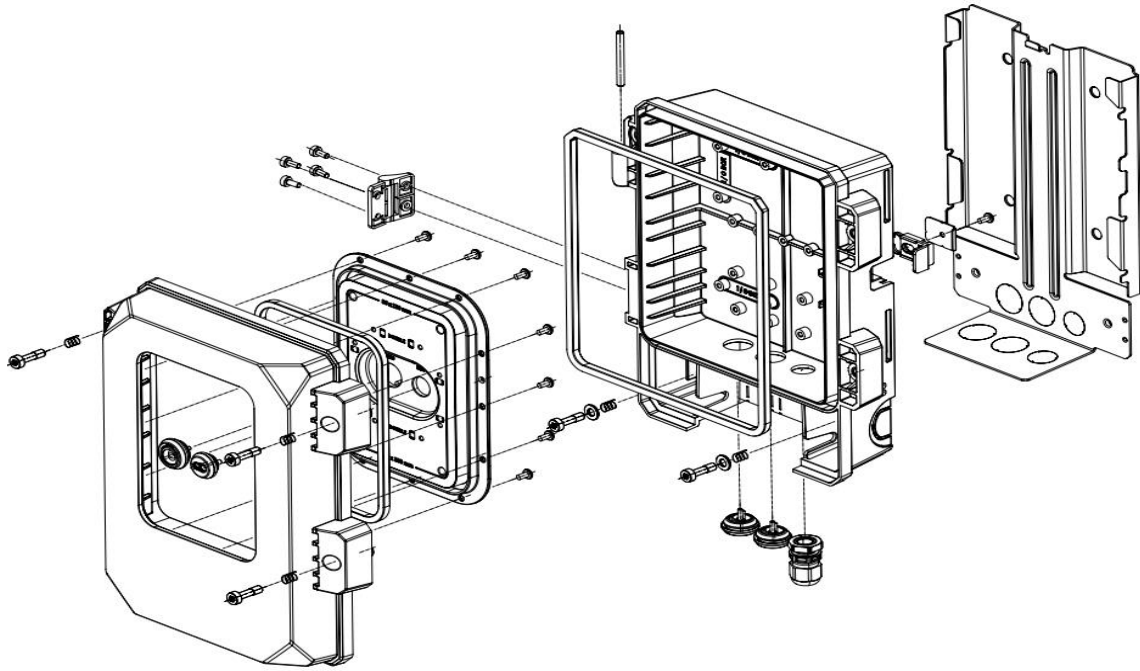


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3.5.3 Installation method





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3.6 Attachment 2 - Parts List

3.6.1 Parts List (1)

Component - Plastics			Yellow Card™
ER016007(f1) , EXL9334U(f1)			File Number: E207780
SABIC JAPAN L L C PACIFIC GRADES - RESIN 2-2 KINUGAOKA MOKA-SHI, Tochigi 321-4392 Japan			
ELCRE: ER016007(f1) , EXL9334U(f1)			
PC/Siloxane, two liquid components (f1) - Suitable for outdoor use with respect to exposure to Ultraviolet Light, Water Exposure and Immersion in accordance with UL 746C. NOTE - Material designation may be followed by a color nomenclature consisting of either an alpha/numeric or numeric/alpha combination.			
Flammability	Value	Test Method	
Flame Rating		UL 94	
1.5 mm, ALL	V-0, 5VB	IEC 60695-11-10, -20	
3.0 mm, ALL	V-0, 5VB		
Thermal	Value	Test Method	
RTI Elec		UL 746B	
1.5 mm	80.0 °C		
3.0 mm	80.0 °C		
RTI Imp		UL 746B	
1.5 mm	80.0 °C		
3.0 mm	80.0 °C		
RTI Ssr		UL 746B	
1.5 mm	80.0 °C		
3.0 mm	80.0 °C		
Physical	Value	Test Method	
Outdoor Suitability	f1	UL 746C	

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Form Number: E207780-106578448

Report Date: 7/7/2023

Last Revised: 7/19/2023 12:52:51 PM

Component - Plastics			Yellow Card™
HN-1068(+)(f1)			File Number: E115797
LOTTE CHEMICAL CORPORATION 56 GOSAN-RO UIWANG-SI, GYEONGGI-DO 16073 Republic of Korea			
INFINO: HN-1068(+)(f1)			
Polycarbonate (PC), pellets (+) - May be replaced by one, two, or three numbers and/or letter(s) (f1) - Suitable for outdoor use with respect to exposure to Ultraviolet Light, Water Exposure and Immersion in accordance with UL 746C.			
Flammability	Value	Test Method	
Flame Rating		UL 94	
1.5 mm, ALL	V-0	IEC 60695-11-10, -20	
3.0 mm, ALL	V-0		
Glow Wire Flammability Index		IEC 60695-2-12	
1.5 mm	960 °C		
3.0 mm	960 °C		
Glow Wire Ignition Temperature		IEC 60695-2-13	
1.5 mm	825 °C		
3.0 mm	825 °C		
Electrical	Value	Test Method	
Hot-wire Ignition (HWI) (1.5 mm)	PLC 3	UL 746A	
High Amp Arc Ignition (HAI) (1.5 mm)	PLC 3	UL 746A	
Comparative Tracking Index (CTI)	PLC 3	UL 746A	
Dielectric Strength	32 kV/mm	ASTM D149	
Volume Resistivity	1.0E+17 ohms-cm	ASTM D257	
Thermal	Value	Test Method	
RTI Elec		UL 746B	
1.5 mm	130 °C		
3.0 mm	130 °C		
RTI Imp		UL 746B	
1.5 mm	130 °C		
3.0 mm	130 °C		
RTI Ssr		UL 746B	
1.5 mm	130 °C		
3.0 mm	130 °C		
Ball Pressure Test (130 °C)	Pass	IEC 60695-10-2	
Physical	Value	Test Method	
Outdoor Suitability	f1	UL 746C	

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Form Number: E115797-103567012

Report Date: 6/24/1999

Last Revised: 10/5/2023 12:24:21 AM



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3.6.2 Parts List (2)

Level	ASSY	금형 코드	품 번	품 명	규 격	물종	구분	Qty
Level	ASSY	금형 코드	품 번	품 명	규 격	물종	구분	Qty
1	.1	기구	AM07-017584A	Assy final	SBP-050NBW	A	N	1
2	.2	기구	AM07-017586A	Assy cover front	SBP-050NBW	A	N	1
3	...	TO07-904617A	FC15-011926A	Cover front	PC EXL9334U 8T9C0202	MD	N	1
4	...		FC18-005590A	Screw Machine	Built-in, Socket head, M6xL21.6, Torx30	SC	-	3
5	...		FC38-001251A	Spring for hanging mountit	SUS304WPB	ETC	-	3
6	...	TO07-904618A	FC15-011929A	Cover inner for replacement	ADC12 + 분재 WHT	DC	N	1
7	...	TO07-904619A	HP07-002031A	Gasket for cover inner	Silicone 30HsA, BLK	RB	N	1
8	...		FC18-007239B	Screw Taptitle	BH, M4xL8, T20	SC	-	12
9	...		MC06-001195B	Bushing for Lan-M20	Silicone 50HsA, BLK	RB	-	1
10	...		MC06-001189B	Bushing for cable 2hole-M16	Silicone 50HsA, BLK	RB	-	1
11	.2	기구	AM07-017587A	Assy cover rear	SBP-050NBW	A	N	1
12	...	TO07-904620A	FC15-011927A	Cover rear	PC EXL9334U 8T9C0202 + M6 insert 4ea	MD	N	1
13	...		FC36-001439A	Gore sheet	VE90814	TP	-	4
14	...		FC18-007238A	Washer plain-M6	SUS316L 1.5t	PD	-	2
15	...		FC18-005590A	Screw Machine	Built-in, Socket head, M6xL21.6, Torx30	SC	-	2
16	...		FC38-001251A	Spring for hanging mountit	SUS304WPB	ETC	-	2
17	...		MC06-001195B	Bushing for Lan-M20	Silicone 50HsA, BLK	RB	-	2
18	...		EP02-001182	Cable gland	WISKA ESKV-LT-SET 10066525 Ø4.5 ~ 10 (RAL7035)	ETC	-	1
19	...		EP02-001184	Cable gland Plug spouts	WISKA Plug BS10	ETC	-	1
20	...	TO07-904621A	HP07-002032A	Gasket for cover front	Silicone 30HsA, BLK	RB	N	1
21	...	TO07-904622A	FC18-007891A	Hook sliding	PC HN-1068 35505 B	MD	N	1
22	...	TO07-904623A	FC15-011928A	Cover spring	SUS304 1t	PD	N	1
23	...		MC19-004041A	Shaft hinge	SUS316L	ETC	-	1
24	...		FC18-007239A	Screw Taptitle	BH, M4xL8, T20	SC	-	1

Level	ASSY	금형 코드	품 번	품 명	규 격	물종	구분	Qty
Level	ASSY	금형 코드	품 번	품 명	규 격	물종	구분	Qty
24	...		FC18-007239A	Screw Taptitle	BH, M4xL8, T20	SC	-	1
25	.2	기구	TO07-904624A	Bracket wall	SUS316L 1.5t + 전해연마	PD	N	1
26	.2	기구	FC18-006625B	Screw Machine	Socket head, M4xL8, T20	SC	-	4
27	.2	기구	FC29-016885A	Hinge torque-PHCS	PHCS81-0xx, SUS	ETC	-	1
28	.2	포장	AM07-017585A	Assy packing	SBP-050NBW	A	N	1
29	...		EP02-001183	Cable gland RDE	WISKA RDE16 10062184 Ø2 ~ 6	ETC	-	1
30	...		MC06-001195B	Bushing for Lan-M20	Silicone 50HsA, BLK	RB	-	1
31	...		FC18-007483A	SCREW-SEMS-M8	SH,T30,M8,L20,SUS,FP,WSP	SC	-	4
32	...	기구	FC18-006625B	Screw Machine	Socket head, M4xL10, T20	SC	-	4
33	...		RM01-006746A	Rail Din35	SUS304	ETC	-	1
34	...		FC18-007239B	Screw Taptitle	BH, M4xL8, T20	SC	-	10
35	...		FC18-007240A	Clamp DA-2N	DA-2N for Ø3.3	ETC	-	2
36	...		FC18-007241A	Clamp DA-4N	DA-4N for Ø6.8	ETC	-	4
37	...		PT01-006224A	Manual	MANUALS-IB;SBP-050NBW	PK	N	1
38	...		PM02-000983A	BAG,ZIPPER	80x130	PK	-	4
39	...		PM02-000985A	BAG,ZIPPER	100x150	PK	-	1
40	...		PM02-000999A	BAG, PE	450x610	PK	-	1
41	...	TO07-904679A	PM02-007334A	CUSHION-TOP	EPS WHT, 60%	PK	N	1
42	...	TO07-904680A	PM02-007333A	CUSHION-BOTTOM	EPS WHT, 60%	PK	N	1
43	...	TO07-904681A	PM02-007332A	CUSHION-BRACKET-WALL	PE	PK	N	1
44	...		PM02-006676A	Packing case Acc.	SW1, E type	PK	-	1
45	...		PM02-003623G	Packing case	SW3, A type	PK	-	1
46	.2		PT03-003217H	Label rating		PK	-	1
47	.2		PT03-000153G	Label packing		PK	-	1

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4. Hose Down Test (Clause 5.7)

4.1 Test date and environmental conditions

4.1.1 Test date: Apr. 09, 2025~ Apr. 16, 2025

4.1.2 Measured Environmental Conditions

Item	Temperature (°C)	Humidity (% R.H.)	Pressure (kPa)
Measurement	19.5	42.3	99.8

4.2 Test Conditions and methods

4.2.1 Description of Test

The enclosure and its external mechanisms were subjected to a stream of water from a hose that has a 25.4 mm (1 in) inside diameter nozzle and delivers at least 240 L (65 gal) per minute. The nozzle was held from 3.0 to 3.5 m (10 to 12 feet) from the enclosure, and the spray of water was directed at all points of potential water entry such as seams, joints, external operating mechanisms, and such. The nozzle was moved along each test point one time at a uniform rate of 6 mm/sec (1/4 in/sec).

4.2.2 Sample Dimension

200 mm, 200 mm, 290 mm, 290 mm, Ø25*3 by 235.5 mm, Ø22 by 69.08 mm,
Ø 23 mm by 72.22 mm
Test Duration = 226.13 secs

4.2.3 Acceptance conditions

The enclosure shall be considered to have met the requirements if at the conclusion of the test no water has entered the enclosure



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4.3 Attachment 3 - Photographs

4.3.1 Hose down test



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4.4 Test result**4.4.1 Test result table**

Sample No (Model)	Water Flow	Presence of water inside	Result
SBP-050NBW	240 LPM	No	Normal

※ Refer to the product photos after the completion of testing in section 4.5.



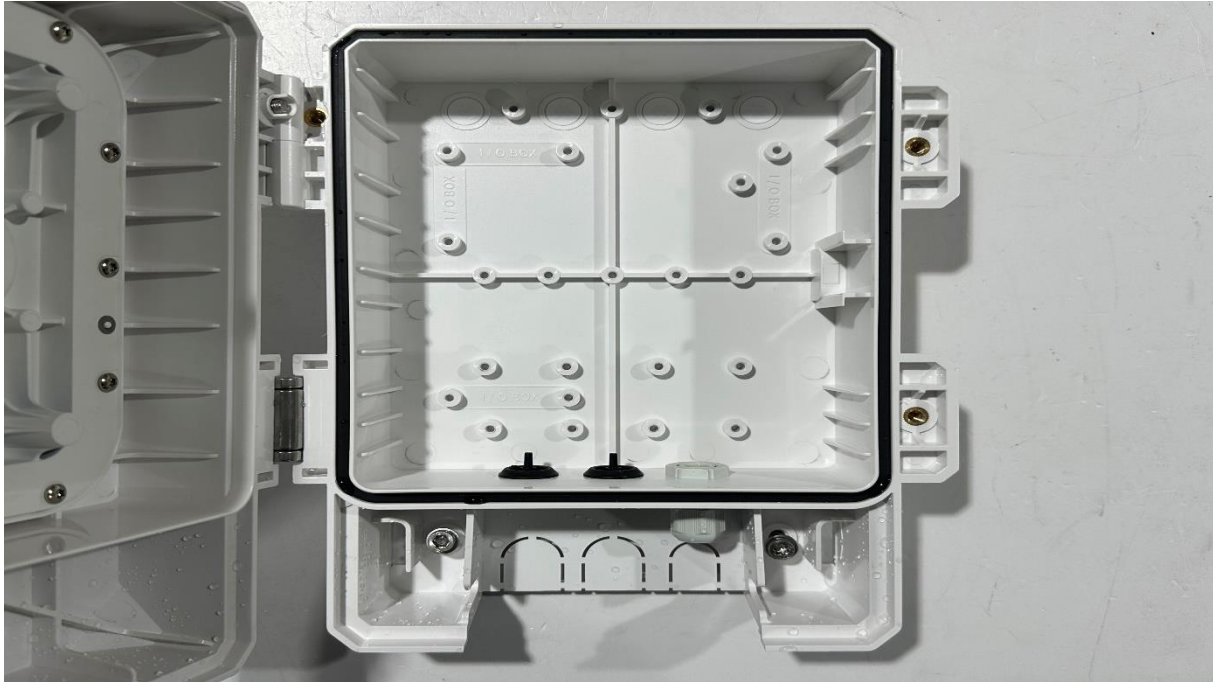
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4.5 Post-test product images

4.5.1 Test sample image (1)



- End -