

HI-MAX VIET NAM

FIRE ALARM AND FIRE EXTINGUISHING SYSTEM



PCCC

HI MAX

◆ MANUFACTURE

◆ SUPPLY

◆ INSTALLATION

◆ MAINTENANCE

◆ SERVICE



Hi-max Vietnam Co., Ltd was established in 2012, has consistently developed in the field of the fire protection with the best reliability, the best quality, and the best safety are mottoes in view of our growth strategy. We always do our best to serve the needs of customers through the supply of a wide range of protection systems and the execution of many projects such as the high intelligent buildings, the large apartment town, the special plants ect. And A/S & maintenance works. We surely believe that a highly sophisticated and reliable technology couple with our developed engineering expertise only will enable us to satisfactorily meet the needs of our clients in the products of fire protection business without failure.



Manufacture



Supply



Installation



Maintenance



Service

Manufacture

Fire Detectors:

Rate of rise heat detector, fixed temperature heat detector, photo-electric smoke detector, heat & smoke combined detector, photo-electric analog type smoke detector, analog type heat detector, optical beam smoke detector, line heat detector, flame detector, single station smoke detector.

Manual Call Set:

Manual call point, alarm bell, indication lamp, strobe, ...

Lights:

Types of emergency exit lights and emergency lighting.

Fire Alarm Control Panel:

P-type control panel, R-type control panel, total fire protection center, CRT unification control panel, fire fighting equipment control, control panel for fire fighting gas, emergency power supply unit, storage battery, power supply unit for transponder.

Installation Works

Fire Extinguishing Mechanical Works:

Installation of foam hydrant box in In-door & Out-door.

Installation of sprinkler system.

CO₂, NAF III, Halon gas system.

Foam fire extinguishing system.

Powder fire extinguishing system.

Fire Protecting Electrical Works:

Installation of automatic fire detecting system.

Installation of escape & indicating system.

Electrical work for incidental work to fire extinguishing system.

Electrical work for incidental work to smoke extinguishing system.

Assist work for wireless phone system.

Maintenance

Check the fire alarm system and fire alarm control panel.

Check fire extinguishers, sprinkler heads, fire cabinets and pumps.

Check the exit guide lights and emergency lights.

Check bells, whistles, and fire alarm lights.

Check fire extinguishing systems with gas, powder, ...

Service

Advise customers on installing fire alarm and fire fighting systems and choosing suitable products for fire protection systems of buildings, ...



❑ History

2023		2016	
October	Hi-Max Viet Nam visited KFI Korea inspection institute	September	Participate in the Security & Fire safety industry exhibition in the Vietnam (2016.09.21 ~ 2016.09.24)
September	Hi-Max Viet Nam visited the international fire protection exhibition in Korea	June	Completed construction of sprinkler LG VINA system
2022		2015	
August	Hi-Max Viet Nam visited the international fire protection exhibition in Korea	August	Participate in the Security & Fire safety industry exhibition in the Vietnam (2015.08.18 ~ 2015.08.20)
March	Hi-Max Viet Nam provides automatic fire alarm equipment and R-Type fire alarm control panel for Samil Pharmaceutical Project	June	Housing a private system development (Intelligent fire monitoring system which allows to detect the presence of error in the remote smoke detectors development)
2020		2014	
July	Hi-Max Viet Nam provides the fire protection devices for Hyosung construction with LPG CAVERN – HYOSUNG project	August	Participate in the Security & Fire safety industry exhibition in the Vietnam (2014.08.20 ~ 2014.08.22)
2019		2013	
October	Hi-Max Viet Nam provides the fire protection devices for Hyosung construction with JETTY LNG project	November	Fire alarm addressable system Vietnam approved fire department
September	Hi-Max Viet Nam provides the fire protection devices for Hyosung construction with PP4 – HYOSUNG project	October	Binh Duong Lotte Mart in Vietnam to supply materials fire alarm system
August	Participate in the Security & Fire safety industry exhibition in the Vietnam	October	Vietnam An Hoa high quality coated paper project (Fire alarm system contract)
March	Completing the fire protection system of PUNGKOOK SaiGon 2 project	September	Fire alarm Beam smoke detector approved by Vietnam and many others
2018		September	Phuong Nam equipment technology jsc (Fire alarm system marking strategy finalization)
October	Hi-Max Viet Nam cooperates with Viet Dragon Fire Protection Company Limited	August	Participate in the international exhibition Vietbuild 2013 in the Vietnam
August	Participate in the Security & Fire safety industry exhibition in the Vietnam	August	Participate in the Security & Fire safety industry exhibition in the Vietnam (2013.08.08 ~ 2013.08.10)
2017		May	Acquired as a quality certification (ISO 9001:2008)
November	Hi-Max Viet Nam provides and fits up the emergency lamps for Lotte Coral Viet Nam company	April	Hi-Max changed the address in Vietnam
September	Completion ceremony from Hi-Max Viet Nam fire-fighting equipment manufacturing plant (2017.09.21)	January	Production and new product development for export
August	Participate in the Security & Fire safety industry exhibition in the Vietnam	2012	
January	MOU Agreement Ceremony between The Philippine Department of the Interior and Local Government & The Korean Federation of Fire Association	August	Participate in the Security & Fire safety industry exhibition in the Vietnam(2012.08.22 ~ 2012.08.24)
		May	Tested in Vietnam fire detectors and vehicles fire alarm control center (24 models)
		April	Acquired as a quality certification (ISO 9001:2008)



PRODUCT LIST

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FIRE DETECTOR					
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9	OPTICAL BEAM SMOKE DETECTOR GST	I9105R	DC 24V	10	
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13	FLAME DETECTOR/EXPLOSION-PROOF FLAME DETECTOR	IRT-330-K/IRT-021-K	DC 24V	15	
14	GAS DETECTOR	ND-114	AC 220V	16	
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16	MANUAL CALL POINT (CIRCLE)	HE2001	DC 24V	17	
17	MANUAL CALL POINT (SQUARE)	HE2001-1	DC 24V	17	
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20	GAS DISCHARGE/COMBINE SIREN AND STROBE	HM4004/HM4004S	DC 24V	19	
21	ELECTRIC SIREN	HR208S	DC 24V	19	
22	INDICATING LAMP	HE2003	DC 24V	20	
23	SPRINKLER MANUAL BUTTON	HM4001	DC 24V	20	
24	DAMPER MANUAL BUTTON	HM4003	DC 24V	21	
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PRODUCT LIST

NO	PRODUCT	MODEL No	STANDARD	PAGE	NOTE
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29	GAS DETECTOR CONTROL CABINET	GRD-3000P		23	
30	EXPLOSION PROOF TYPE ALARM SIGNAL & SIREN SIGNAL	FXAL	Ex d IIC T6 IP65	24	
31	EXPLOSION PROOF TYPE STROBE	FVA	Ex d IIC T6 IP65	24	
32	EXPLOSION PROOF TYPE EXIT LIGHTING	FUFL-LED-S	Ex d IIB+H ₂ T6	25	
33	EXPLOSION PROOF TYPE EMERGENCY LIGHTING	WC-14-3	Ex d IIC T6 IP65	25	
34	EXPLOSION PROOF GAS DISCHARGE WARNING LIGHT	FUFL	Ex d IIB+H ₂ T6	26	
35	EXPLOSION PROOF TYPE FIRE ALARM MANUAL STATION	P-2	Ex d IIB+H ₂ T6	26	
36	EXPLOSION PROOF TYPE GAS MANUAL STATION	FMS	Ex d IIB+H ₂ T6	27	
37	EXPLOSION PROOF TYPE SVP PANEL	SVP	Ex d IIB+H ₂ T6 IP65	27	
38	EXPLOSION PROOF PUMP MONITOR LIGHT	FOB-2	Ex d IIB+H ₂ T6	28	
39	EXPLOSION PROOF TYPE JUNCTION & CONTROL BOX	FCJB	Ex d IIB+H ₂ T6	28	
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51	MODULE 2/2	HIS602	2/2	42	TYPE R
52	MODULE 4/4	HIS604	4/4	42	TYPE R



PRODUCT LIST

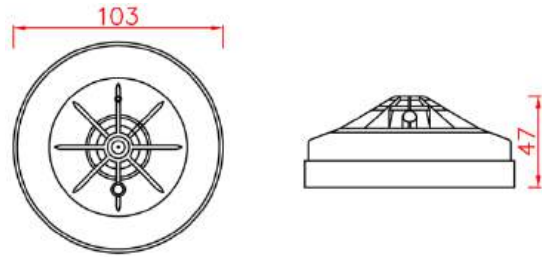
NO	PRODUCT	MODEL No	STANDARD	PAGE	NOTE
53	MODULE 2/2	HIS602	2/2	43	TYPE R
54	MODULE 4/4	HIS604	4/4	43	TYPE R
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59	EMERGENCY EXIT LIGHTING (SMALL)	HL3111/-1	SIDE/BOTH SIDES	54	LED
60	EMERGENCY EXIT LIGHTING (MEDIUM)	HL3113/-1	SIDE/BOTH SIDES	54	LED
61	EMERGENCY EXIT LIGHTING (LARGE)	HL3119/-1	SIDE/BOTH SIDES	55	LED
62	EMERGENCY EXIT LIGHTING (TYPE OF DIRECTION)	HL3117	SIDE/BOTH SIDES	55	LED
63	EMERGENCY EXIT LIGHTING (TYPE OF DIRECTION)	HL3022	FLOOR FLUSH	56	LED
64	EMERGENCY EXIT LIGHTING (TYPE OF DIRECTION)	HL3081	FLOOR FLUSH	56	LED
65	EMERGENCY EXIT LIGHTING (MEDIUM)	KT-610/KT-620	SIDE/BOTH SIDES	57	LED
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68	SPRINKLER (PENDENT)	SPK		58	
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1

RATE OF RISE HEAT DETECTOR



❖ **PRODUCT DRAWINGS**



❖ **SPECIFICATIONS**

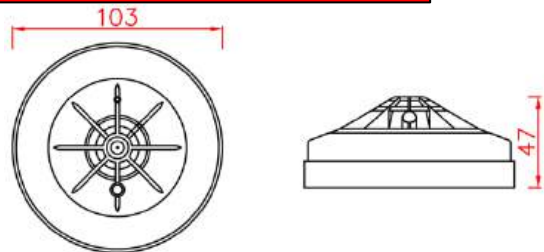
MODEL No	HD1081
POWER SOURCE	DC 24V / 10mA
AMBIENT CONDITION	-10°C TO 50°C, 95% RH
SIZE/WEIGHT	Ø103mm x D47mm (INCLUDING BASE) / 84g
OPERATING TEMPERATURE	HEAT RISE RATE ~10°C/MIN
OPERATING INDICATOR	LED-RED COLOR
USAGE STANDARD	MAX 50EA / 1 ZONE
INSTALLATION HEIGHT	UNDER 8m
RANGE OF DETECT	UNDER 4m: 70m ² / UNDER 8m: 35m ²
APPLICATION	OFFICE, BASEMENT, TERMINAL, WAREHOUSE, CHURCH, RESTAURANT, SCHOOL, DEPARTMENT STORE, GYM, ...

2

FIXED TEMPERATURE HEAT DETECTOR



❖ **PRODUCT DRAWINGS**



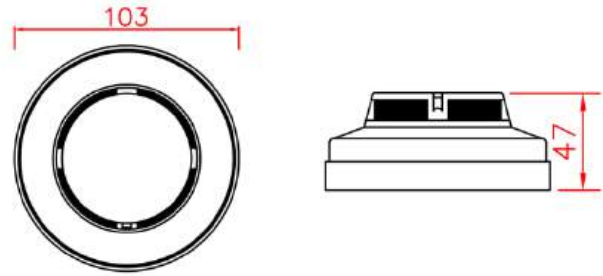
❖ **SPECIFICATIONS**

MODEL No	HD1082
POWER SOURCE	DC 24V / 10mA
AMBIENT CONDITION	-10°C TO 50°C, 95% RH
SIZE/WEIGHT	Ø103mm x D47mm (INCLUDING BASE) / 84g
OPERATING TEMPERATURE	70°C
OPERATING INDICATOR	LED-RED COLOR
USAGE STANDARD	MAX 50EA / 1 ZONE
INSTALLATION HEIGHT	UNDER 8m
RANGE OF DETECT	UNDER 4m: 70m ² / UNDER 8m: 35m ²
APPLICATION	KITCHEN, BOILER ROOM, WELDING WORKSHOP, DRYING ROOM, SEWAGE DISPOSAL PLANT, PROJECTION ROOM, ...

3

PHOTO-ELECTRIC SMOKE DETECTOR

❖ **PRODUCT DRAWINGS**



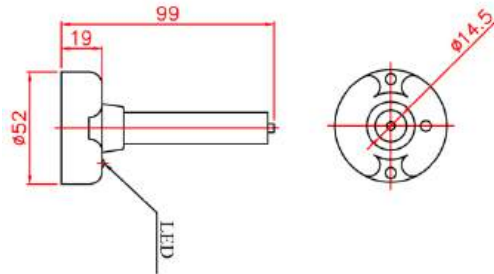
❖ **SPECIFICATIONS**

MODEL No	HD1003
POWER SOURCE	DC 24V / 10mA
AMBIENT CONDITION	-10 °C TO 50 °C, 95% RH
SIZE/WEIGHT	Ø103mm x D47mm (INCLUDING BASE) / 119g
OPERATING INDICATOR	LED-RED COLOR
USAGE STANDARD	MAX 25EA / 1 ZONE
RANGE OF DETECT	UNDER 4m: 150m ² / UNDER 15m: 70m ²
APPLICATION	OFFICE, BASEMENT, TERMINAL, WAREHOUSE, CHURCH, RESTAURANT, DEPARTMENT STORE, HOTEL ROOM, STAIR COMPUTER ROOM, CONFERENCE ROOM, KARAOKE,....

4

WATERPROOF TYPE HEAT DETECTOR

❖ **PRODUCT DRAWINGS**



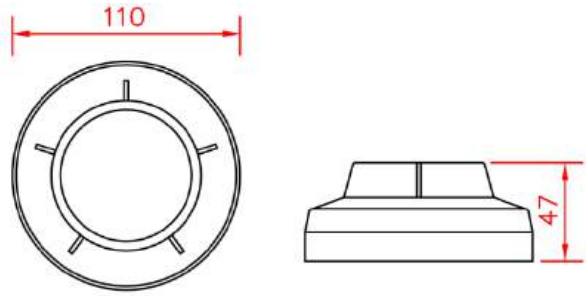
❖ **SPECIFICATIONS**

MODEL No	HD70S
POWER SOURCE	DC 24V
AMBIENT CONDITION	-10 °C TO 50 °C
SIZE/WEIGHT	W52mm x H99mm, Ø14.5mm
OPERATING TEMPEATURE	70 °C / 90 °C / 120 °C
OPERATING INDICATOR	LED-RED COLOR
RANGE OF DETECT	UNDER 4m: 60 m ² OVER 4m - UNDER 8m: 35m ²
APPLICATION	AREAS WITH HIGH HUMIDITY

5

**PHOTO-ELECTRIC ANALOG
TYPE SMOKE DETECTOR**

❖ PRODUCT DRAWINGS



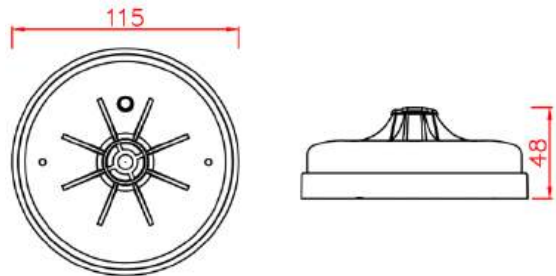
❖ SPECIFICATIONS

MODEL No	HD1015
POWER SOURCE	DC 24V / 3mA
AMBIENT CONDITION	-10 °C TO 50 °C, 95% RH
SIZE/WEIGHT	Ø110mm x H47mm / 133g
TYPE	ADDRESS
OPERATING INDICATOR	LED-RED COLOR
USAGE STANDARD	250EA / LOOP
FIRE DETECTION DENSITY	3% ~ 18%
APPLICATION	OFFICE, BASEMENT, TERMINAL, WAREHOUSE, CHURCH, RESTAURANT, DEPARTMENT STORE, HOTEL ROOM, CONFERENCE ROOM, KARAOKE, ...

6

**ANALOG TYPE HEAT
DETECTOR**

❖ PRODUCT DRAWINGS



❖ SPECIFICATIONS

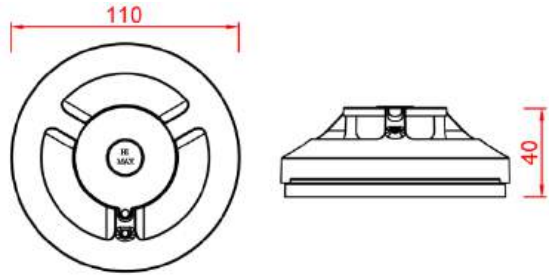
MODEL No	HD1014
POWER SOURCE	DC 24V / 3mA
AMBIENT CONDITION	-10 °C TO 50 °C, 95% RH
SIZE/WEIGHT	Ø115mm x H48mm / 100g
TYPE	ADDRESS
OPERATING INDICATOR	LED-RED COLOR
USAGE STANDARD	250EA / LOOP
FIRE DETECTION TEMPERATURE	30°C ~ 90°C
APPLICATION	BASEMENT, TERMINAL, WAREHOUSE, CHURCH, RESTAURANT, DEPARTMENT STORE, HOTEL ROOM, CONFERENCE ROOM, KARAOKE, ...

7

**PHOTO-ELECTRIC ANALOG
TYPE SMOKE DETECTOR**



❖ **PRODUCT DRAWINGS**



❖ **SPECIFICATIONS**

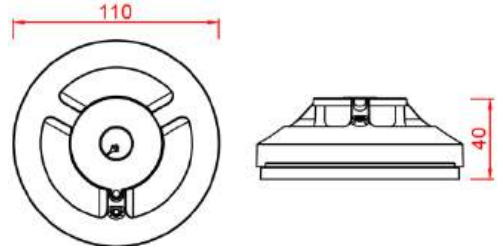
MODEL No	HD1015
POWER SOURCE	DC 24V / 3mA
AMBIENT CONDITION	-10 °C TO 50 °C, 90% RH
SIZE/WEIGHT	Ø110mm x D40mm / 100g
TYPE	ADDRESS
OPERATING INDICATOR	LED-RED COLOR
USAGE STANDARD	150EA / LOOP
FIRE DETECTION DENSITY	5% ~ 15% (FIRE DETECTION DENSITY CAN BE SET)
APPLICATION	OFFICE, BASEMENT, TERMINAL, WAREHOUSE, CHURCH, RESTAURANT, DEPARTMENT STORE, HOTEL ROOM, CONFERENCE ROOM, KARAOKE, ...

8

**ANALOG TYPE HEAT
DETECTOR**



❖ **PRODUCT DRAWINGS**






❖ **SPECIFICATIONS**

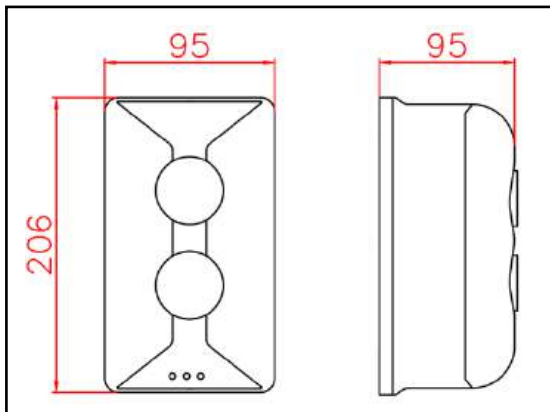
MODEL No	HD1014
POWER SOURCE	DC 24V / 3mA
AMBIENT CONDITION	-10 °C TO 50 °C, 90% RH
SIZE/WEIGHT	Ø110mm x D40mm / 90g
TYPE	ADDRESS
OPERATING INDICATOR	LED-RED COLOR
USAGE STANDARD	150EA / LOOP
FIRE DETECTION TEMPERATURE	40°C ~ 80°C (FIRE DETECTION TEMPERATURE CAN BE SET)
APPLICATION	OFFICE, BASEMENT, TERMINAL, WAREHOUSE, CHURCH, RESTAURANT, DEPARTMENT STORE, HOTEL ROOM, CONFERENCE ROOM, KARAOKE, ...

9

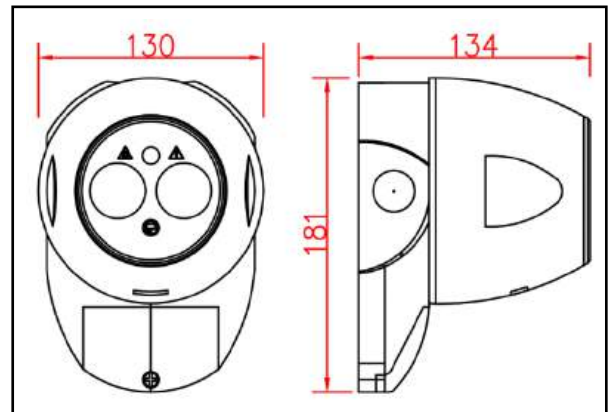
BEAM SMOKE DETECTOR

MODEL No	I9105R	HD1012	HD1016
PRODUCT			
COMPONENT	OPTICAL BEAM SMOKE DETECTOR / REFLECTOR	OPTICAL BEAM SMOKE DETECTOR (UL) / REFLECTOR	OPTICAL BEAM SMOKE DETECTOR SYSTEM / CONTROLLER / REFLECTOR
RANGE OF DETECT	100m	120m	100m
AMBIENT CONDITION	-10°C ~ 50°C, 95% RH	-20°C ~ 55°C, 95% RH	-10°C ~ 50°C, 95% RH
POWER SOURCE	DC 24V		
SIZE	W206mm x H95mm x D95mm	W130mm x H181mm x D134mm	W200mm x H235mm x D71mm
TYPE APPROVAL	FM/EN54:12/UL268/VdS/BOSEC		
INSTALLATION DISTANCE	1M FROM THE WALL		
APPLICATION	MUSEUM, SPORT ROOM, WORKSHOP ROOM, AIRPORT, EXHIBITION ROOM, BASEBALL, FACTORY, WAREHOUSE, ...		

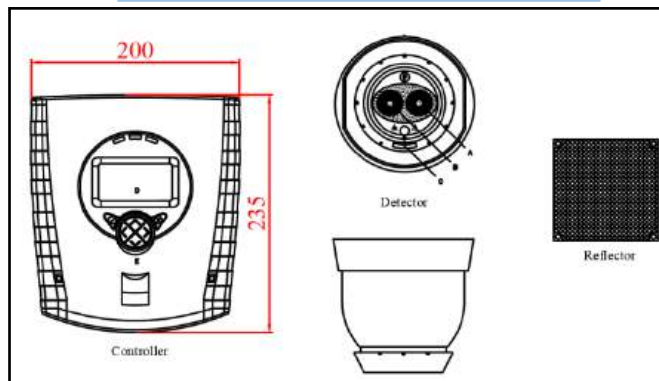
I9105R



HD1012



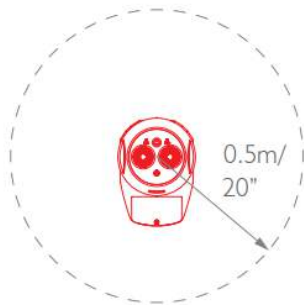
HD1016



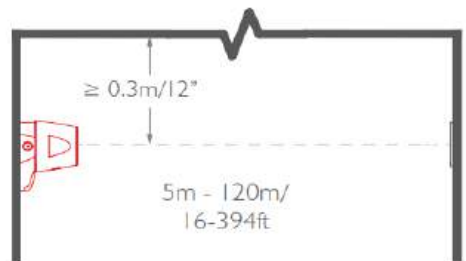
❖ SYSTEM DESCRIPTION



The beam detector will emit an invisible infrared beam, which is then reflected back by the prism block mounted directly on the opposite side in the same line as the beam detector. The reflected infrared rays are detected by the receiver eye and analyzed.

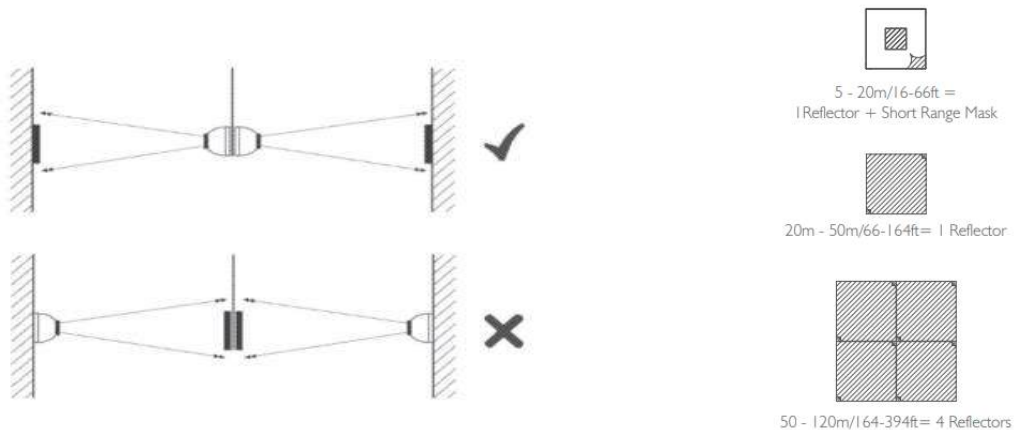


Ensure clear line of sight from detector to reflector



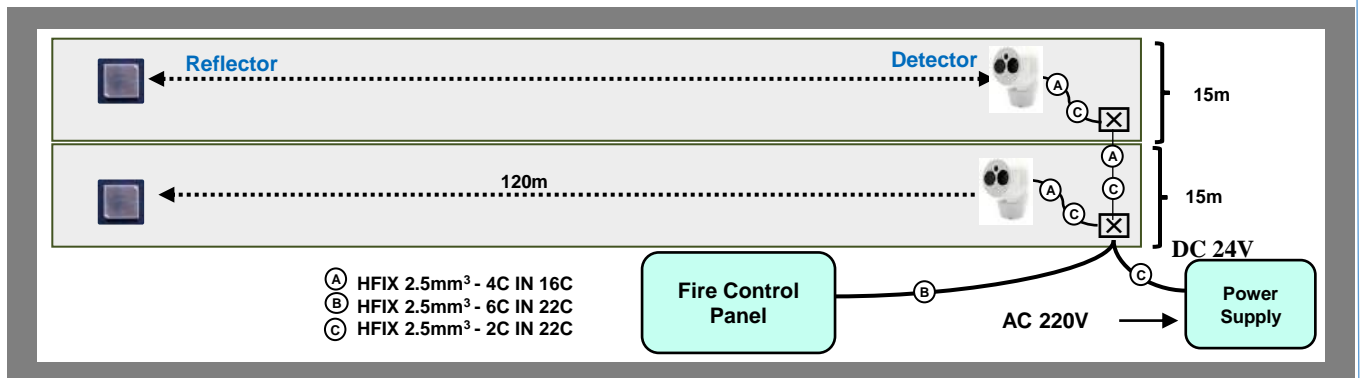
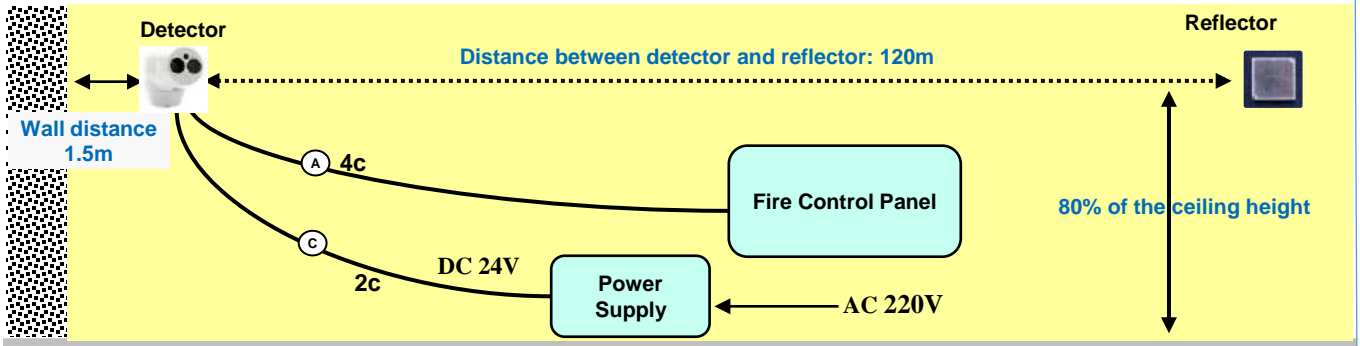
Mount on solid surfaces (structural wall or girder)

- Check the beam spacing against local regulations.
- Position beam as high as possible, but with a minimum distance of 0.5m from detector to ceiling.
- Mount detector and reflector directly opposite each other.
- Do NOT position detector where personnel or objects can enter the beam path.
- Do NOT position 2 detectors facing each other.
- LED indicator must face downward.



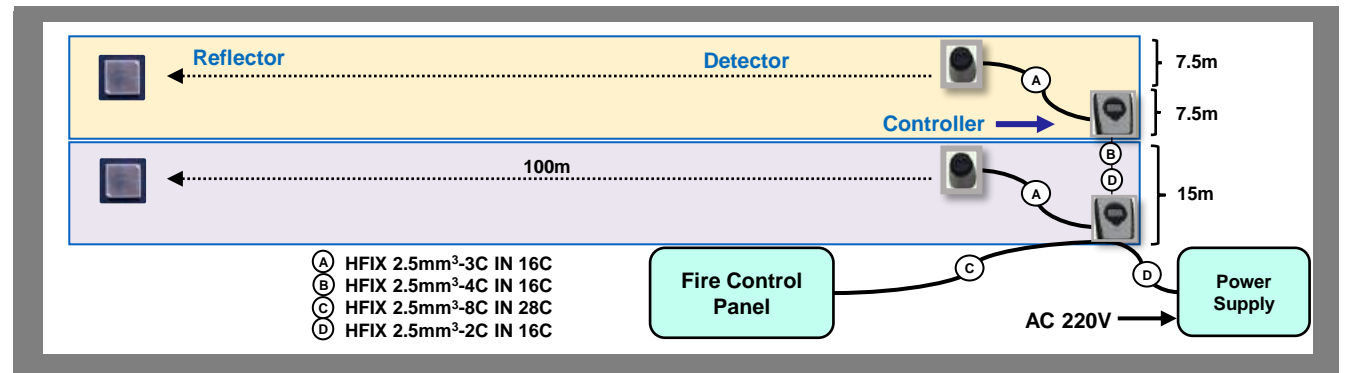
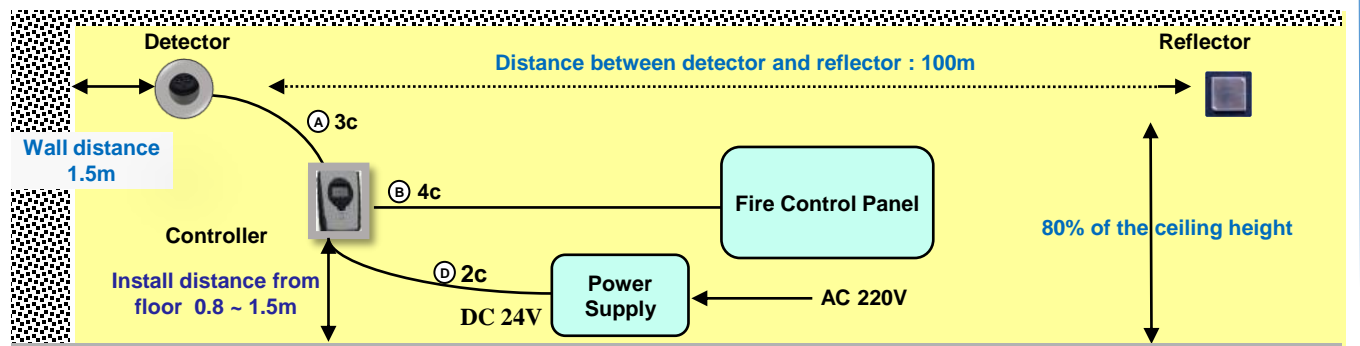
INSTALLTION GUIDE

No. HD1012



- (A) HFIX 2.5mm³ - 4C IN 16C
- (B) HFIX 2.5mm³ - 6C IN 22C
- (C) HFIX 2.5mm³ - 2C IN 22C

No. HD1016



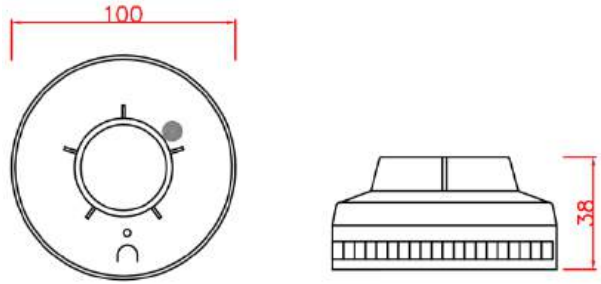
- (A) HFIX 2.5mm³-3C IN 16C
- (B) HFIX 2.5mm³-4C IN 16C
- (C) HFIX 2.5mm³-8C IN 28C
- (D) HFIX 2.5mm³-2C IN 16C

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SINGLE STATION SMOKE DETECTOR



❖ **PRODUCT DRAWINGS**



❖ **SPECIFICATIONS**

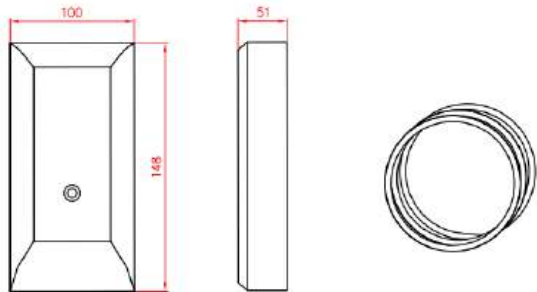
MODEL No	HD1003S
POWER SOURCE	PIN LITHIUM 3V
AMBIENT CONDITION	-10 °C TO 50 °C, 95% RH
SIZE/WEIGHT	Ø100mm x D38mm / 138g
OPERATING INDICATOR	LED-RED COLOR
INSTALLATION HEIGHT	UNDER 8m
RANGE OF DETECT	UNDER 4m: 150m ² / OVER 4m ~ UNDER 8m: 75m ²
APPLICATION	DETACHED HOUSE, STUDIO, ONE ROOM HOUSE, OFFICE, KARAOKE, ...

11

LINE TYPE PNEUMATIC RATE OF RISE HEAT DETECTOR



❖ **PRODUCT DRAWINGS**



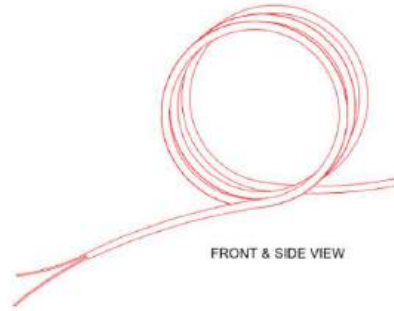
❖ **SPECIFICATIONS**

MODEL No	P102/P102-1
POWER SOURCE	DC24V / 10mA
AMBIENT CONDITION	-10 °C TO 50 °C, 95% RH
SIZE/WEIGHT	W100mm x H148mm x D51mm / 610g
PIPE DIAMETER	OUTSIDE: 2.0mm INSIDE : 1.4mm
INSTALLATION WIDTH	OVER 20m ~ UNDER 100m
RANGE OF DETECT	OVER 8m ~ UNDER 15m: 36m ²
STANDARD LENGTH	100m
APPLICATION	WASTEWATER TREATMENT PLANT, WAREHOUSE, BATTERY ROOM, GENERATOR ROOM, ENGINE ROOM, ...

12

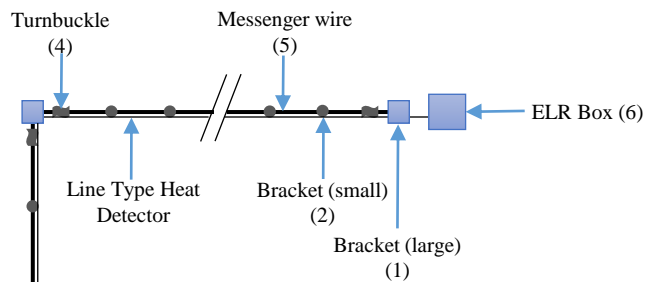
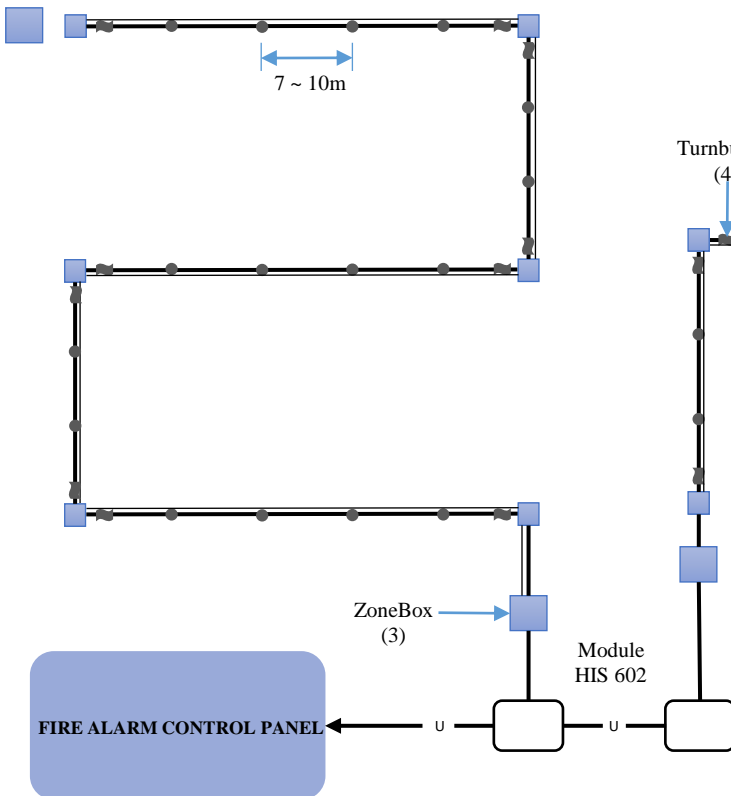
WIRE-TYPE HEAT DETECTOR

❖ PRODUCT DRAWINGS





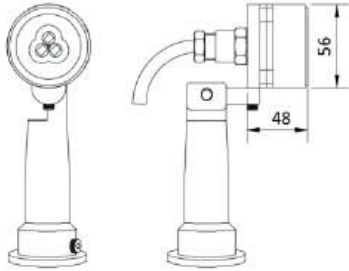
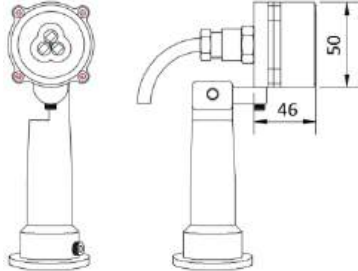
❖ SPECIFICATIONS

MODEL No	HD1008
POWER SOURCE	DC 24V / 10mA
AMBIENT CONDITION	-10°C TO 50°C, 95% RH
SIZE/WEIGHT	DIAMETER 0,9 mm
OPERATING TEMPERATURE	70°C / 90°C / 120°C
INSTALLATION HEIGHT	UNDER 8m
STANDARD LENGTH	UNDER 1.200m
APPLICATION	BOILER ROOM, WELDING WORKSHOP, DRYING ROOM, SEWAGE DISPOSAL PLANT, PROJECTION ROOM, BURIED PIPE AND CULVERT, ...

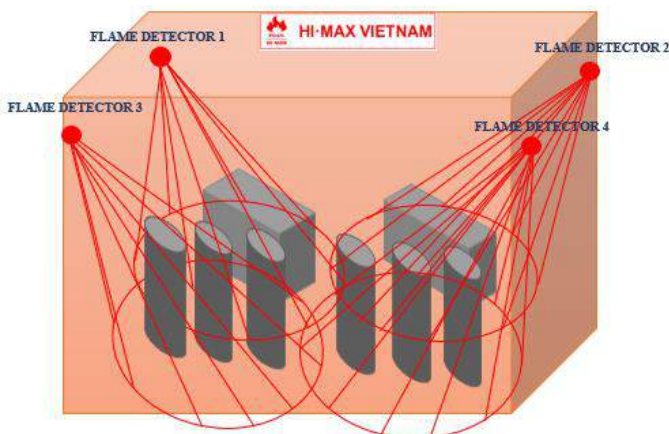
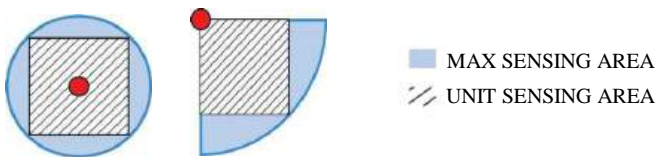


No	Installation Standard
1	Install the large rack in a straight line
2	Permanently install each small shelf section of 7-10m
3	Each zone will connect to a ZoneBox
4	Fixing screws - Bracket (large): 2EA Fixing screw - Bracket (small): 1EA
5	Attach the cable to the bracket
6	Connect a resistor at the end of the wire heat detector

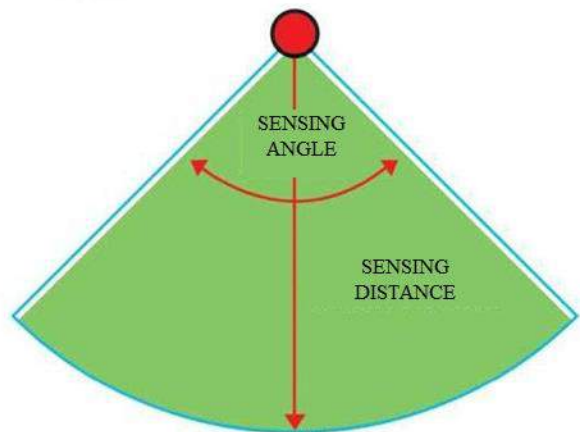
13 FLAME DETECTOR/ EXPLOSION PROOF FLAME DETECTOR

MODEL No	IRT-330-K	IRT-021-K
PRODUCT		
PRODUCT DRAWINGS		
SENSING ANGLE	90°	90°
POWER SOURCE	DC 24V	
AMBIENT CONDITION	-40°C to +85°C, 95% RH	
SIZE / WEIGHT	56mm x 48mm (580g)	50mm x 46mm (930g)
MATERIAL	ANODIZED ALUMINUM	STAINLESS STEEL
RANGE OF DETECT	50m	50m
TYPE	IR3	IR3 Ex d IIC T6, Ex tD A21 IP67 T85°C
APPLICATION	MUSEUM, GYMNASIUM, CONFERENCE, HOTEL LOUNGE, AIRPORT, ART CENTER, DOM BASEBALL PARK, FACTORY, PLANT, WAREHOUSE, CLEAN ROOM, ...	

❖ REFERENCE SENSING AREA

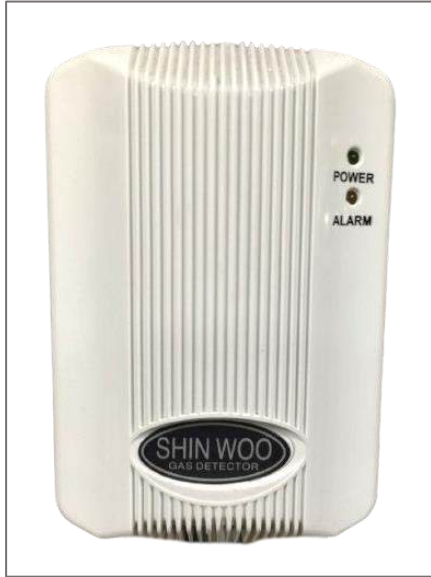


FLAME DETECTOR

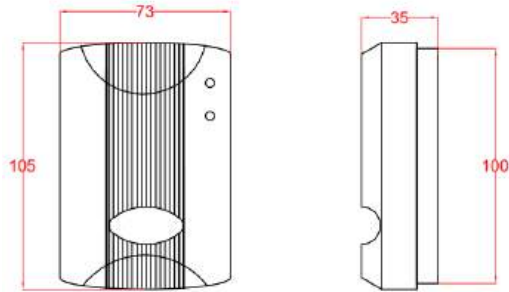


- ❑ Type of flame detector are different depending on the sensing angle and sensing distance.
- ❑ So, the Based on the reference sensing area of ceiling and wall to install the appropriate number.

14 GAS DETECTOR



❖ **PRODUCT DRAWINGS**



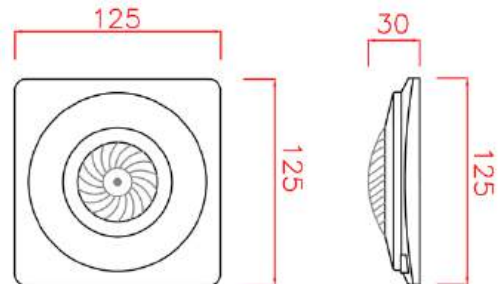
❖ **SPECIFICATIONS**

MODEL No	ND-114
POWER SOURCE	AC 220V, 50/60Hz
AMBIENT CONDITION	-20°C TO 40°C, 95% RH
SIZE/WEIGHT	W73mm x H105mm x D35mm / 220g
ALARM METHOD	YELLOW LED AND BUZZER
MEASURING GAS	LPG, LNG
POWER CONSUMPTION	3.6 W
APPLICATION	HAZARDOUS AREA, HOUSING, OFFICE, ...

15 STROBE



❖ **PRODUCT DRAWINGS**



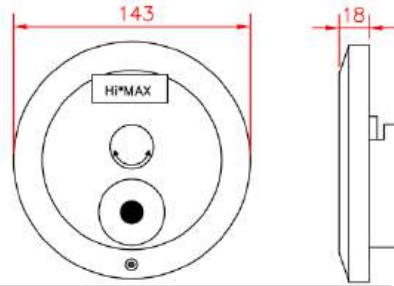
❖ **SPECIFICATIONS**

MODEL No	HE2006-1
POWER SOURCE	DC 24V / 120mA
AMBIENT CONDITION	-10°C TO 50°C, 95% RH
SIZE	W125mm x H125mm x D30mm / 100g
SOURCE OF LIGHT	HIGHT BRIGHTNESS LED
INSTALLATION HEIGHT	2.0m ~ 2.5m
APPLICATION	OFFICE, BASEMENT, TERMINAL, WAREHOUSE, CHURCH, RESTAURANT, DEPARTMENT STORE, HOTEL, COMPUTER ROOM, CONFERENCE ROOM, KARAOKE,...

16 **MANUAL CALL POINT (CIRCLE)**



❖ **PRODUCT DRAWINGS**



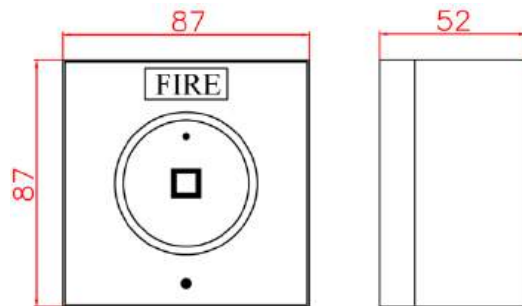
❖ **SPECIFICATIONS**

MODEL No	HE2001
POWER SOURCE	DC 24V / 100mA
AMBIENT CONDITION	-10°C TO 50°C, 95% RH
SIZE/WEIGHT	Ø143mm x D18mm / 130g
COMPOSITION	TELEPHONE JACK, PUSH BUTTON, RESPONSE LED
INSTALLATION HEIGHT	0.8m ~ 1.5m / DISTANCE 25m
APPLICATION	OFFICE, BASEMENT, TERMINAL, WAREHOUSE, CHURCH, RESTAURANT, DEPARTMENT STORE, HOTEL, COMPUTER ROOM, CONFERENCE ROOM, KARAOKE, ...

17 **MANUAL CALL POINT (SQUARE)**



❖ **PRODUCT DRAWINGS**



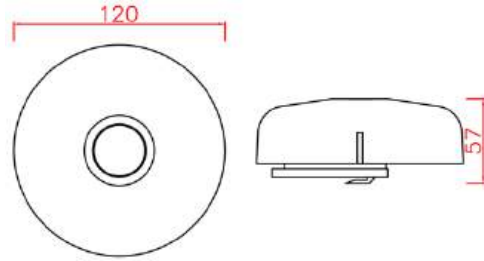
❖ **SPECIFICATIONS**

MODEL No	HE2001-1
POWER SOURCE	DC 24V / 100mA
AMBIENT CONDITION	-10°C TO 50°C, 95% RH
SIZE/WEIGHT	W87mm x H87mm x D52mm / 143g
COMPOSITION	PUSH BUTTON, RESPONSE LED
INSTALLATION HEIGHT	0.8 ~ 1.5m / DISTANCE 25m
APPLICATION	OFFICE, BASEMENT, TERMINAL, WAREHOUSE, CHURCH, RESTAURANT, DEPARTMENT STORE, HOTEL, COMPUTER ROOM, CONFERENCE ROOM, KARAOKE, ...

18 ALARM BELL



❖ PRODUCT DRAWINGS



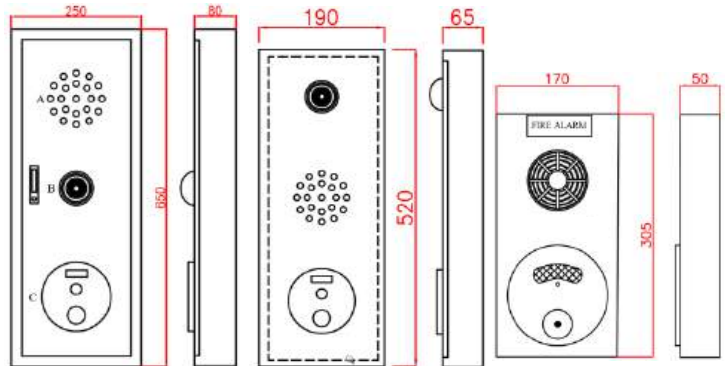
❖ SPECIFICATIONS

MODEL No	HE2002
RATED VOLATAGE	DC 24V / 50mA
AMBIENT CONDITION	-10°C TO 50°C, 95% RH
SIZE/WEIGHT	Ø120mm x D57mm / 200g
SOUND OUTPUT	MORE THAN 90dB AT 1m
INSTALLATION HEIGHT	0.8 ~ 1.5m / DISTANCE 25m
APPLICATION	OFFICE, BASEMENT, TERMINAL, WAREHOUSE, CHURCH, RESTAURANT, DEPARTMENT STORE, HOTEL, COMPUTER ROOM, CONFERENCE ROOM, KARAOKE, ...

19 FIRE ALARM COMBINATION BOX



❖ PRODUCT DRAWINGS



❖ SPECIFICATIONS

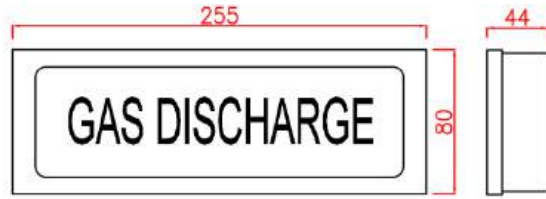
MODEL No (WALL MOUNT TYPE)		HM4007 (STEEL, INOX), HM4009 (STEEL) HM4009S (ABS)
SIZE / WEIGHT	HM4007	W250mm x H650mm x D80mm / 4.5Kg
	HM4009	W190mm x H520mm x D65mm / 2.0Kg
	HM4009S	W170mm x H305mm x D50mm / 1.0Kg
INSTALLATION HEIGHT		0.8m ~ 1.5m / DISTANCE 25m
APPLICATION		OFFICE, BASEMENT, TERMINAL, WAREHOUSE, CHURCH, RESTAURANT, DEPARTMENT STORE, HOTEL, COMPUTER ROOM, CONFERENCE ROOM, KARAOKE, ...

20

**GAS DISCHARGE/
SIREN AND STROBE**



❖ **PRODUCT DRAWINGS**



❖ **SPECIFICATIONS**

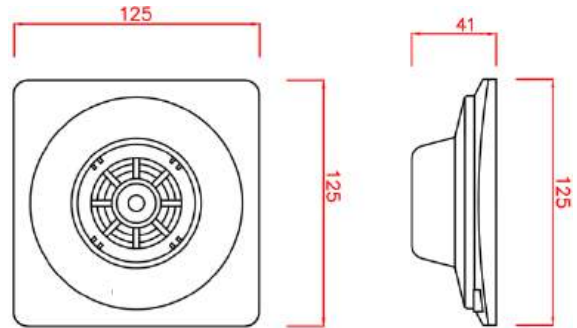
MODEL No	HM4004	HM4004S
POWER SOURCE	DC 24V / 250mA	DC 24V / 310mA
AMBIENT CONDITION	-10°C TO 50°C, 95% RH	
SIZE/WEIGHT	W255mm x H80mm x D44mm / 500g	Ø83mm x H125mm x D112mm / 470g
COLOR	IVORY	GREY
INSTALLATION HEIGHT	HEAD OF THE DOOR	
APPLICATION	ELECTRIC ROOM, COMPUTER ROOM, BUILDING SAFTY CENTER, CLEAN ROOM, ...	

21

ELECTRIC SIREN



❖ **PRODUCT DRAWINGS**



❖ **SPECIFICATIONS**

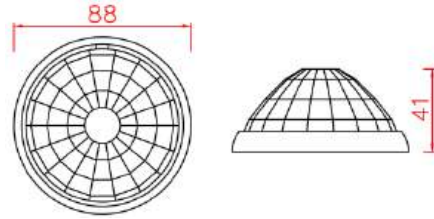
MODEL No	HR208S
POWER SOURCE	DC 24V / 60mA
SIZE/WEIGHT	W125mm x H125mm x D41mm / 158g
SOUND OUTPUT	MORE THAN 90dB AT 1m
COLOR	WHITE
INSTALLATION HEIGHT	2.0m ~ 2.5m
APPLICATION	OFFICE, BASEMENT, TERMINAL, WAREHOUSE, CHURCH, RESTAURANT, DEPARTMENT STORE, HOTEL, COMPUTER ROOM, CONFERENCE ROOM, KARAOKE, ...

22

INDICATING LAMP



❖ **PRODUCT DRAWINGS**



❖ **SPECIFICATIONS**

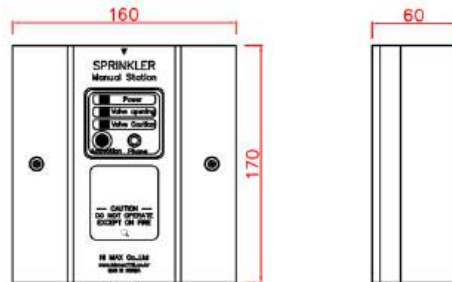
MODEL No	HE2003
POWER SOURCE	DC 24V / 30mA
AMBIENT CONDITION	10°C TO 50°C, 85% RH
SIZE/WEIGHT	Ø88mm x D41mm / 36g
SOURCE OF LIGHT	LED
APPLICATION	OFFICE, BASEMENT, TERMINAL, WAREHOUSE, CHURCH, RESTAURANT, DEPARTMENT STORE, HOTEL, COMPUTER ROOM, CONFERENCE ROOM, KARAOKE, ...

23

SPRINKLER MANUAL BUTTON



❖ **PRODUCT DRAWINGS**

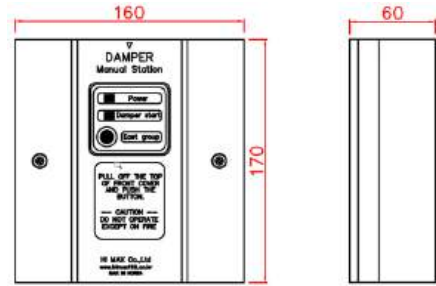


❖ **SPECIFICATIONS**

MODEL No	HM4001
POWER SOURCE	DC 24V / 100mA
AMBIENT CONDITION	-10°C TO 50°C, 95% RH
SIZE/WEIGHT	W160mm x H170mm x D60mm / 550g
COMPOSITION	POWER LAMP, VALVE CAUTION LAMP, VALVE OPEN LAMP, VALVE ACTUATING SWITCH, TELEPHONE JACK
COLOR	GRAY
INSTALLATION HEIGHT	0.8m ~ 1.5m
APPLICATION	OFFICE, BASEMENT, TERMINAL, WAREHOUSE, CHURCH, RESTAURANT, DEPARTMENT STORE, HOTEL, COMPUTER ROOM, CONFERENCE ROOM, KARAOKE, ...

24 DAMPER MANUAL BUTTON

❖ PRODUCT DRAWINGS

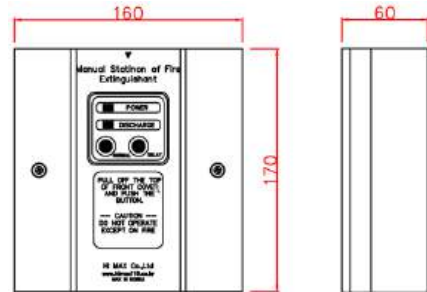


❖ SPECIFICATIONS

MODEL No	HM4003
POWER SOURCE	DC 24V / 100mA
AMBIENT CONDITION	-10°C TO 50°C, 95% RH
SIZE/WEIGHT	W160mm x H170mm x D60mm / 550g
COMPOSITION	POWER LAMP, VALVE CAUTION LAMP, VALVE OPEN LAMP, VALVE ACTUATING SWITCH, TELEPHONE JACK
COLOR	GRAY
INSTALLATION HEIGHT	0.8m ~ 1.5m
APPLICATION	OFFICE, BASEMENT, TERMINAL, WAREHOUSE, CHURCH, RESTAURANT, DEPARTMENT STORE, HOTEL, COMPUTER ROOM, CONFERENCE ROOM, KARAOKE, ...

25 EXTINGUISHING GAS MANUAL BUTTON

❖ PRODUCT DRAWINGS



❖ SPECIFICATIONS

MODEL No	HM4002
POWER SOURCE	DC 24V / 100mA
AMBIENT CONDITION	-10°C TO 50°C, 95% RH
SIZE/WEIGHT	W160mm x H170mm x D60mm / 550g
COMPOSITION	POWER, GAS RELEASE INDICATOR, RELEASE THE PUSH BUTTON TYPE START SWITCH
COLOR	GRAY
INSTALLATION HEIGHT	0.8m ~ 1.5m
APPLICATION	ELECTRIC ROOM, COMPUTER ROOM, BUILDING SAFTY CENTER, CLEAN ROOM, ...

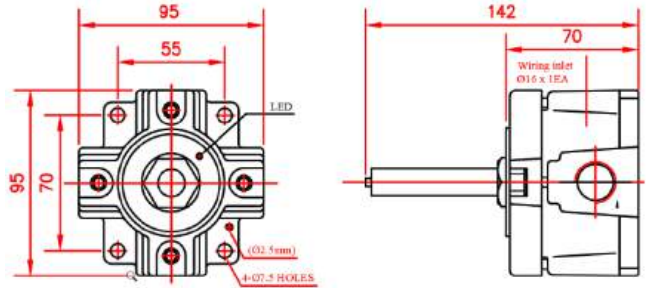
❖ Explosion Proof Type

26

**EXPLOSION PROOF
TYPE HEAT DETECTOR**



❖ PRODUCT DRAWINGS



❖ SPECIFICATIONS

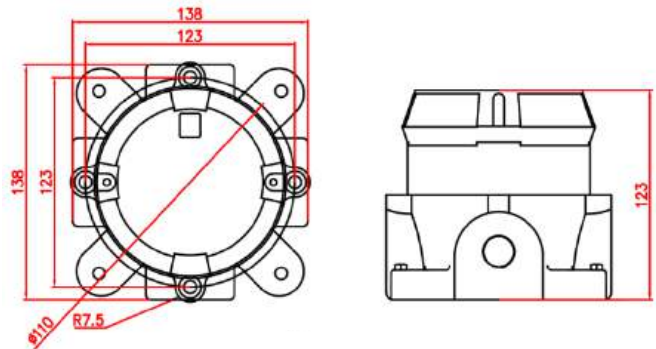
MODEL No	HK-EXFD 70
TYPE	EXPLOSION PROOF (Ex d IIB+H ₂ T6)
POWER SOURCE	DC 24V
AMBIENT CONDITION	-10°C TO MAX 20°C LOWER TO THE PERFORMANCE TEMPERATURE OF THE DETECTOR, MAX 95% RH
SIZE/WEIGHT	W95mm x H142mm x D95mm / 0.8Kg
OPERATING TEMPEATURE	70°C / 90°C / 120°C / 130°C
OPERATING INDICATOR	LED-RED COLOR
TYPICAL USAGE	MAX 50EA
INSTALLATION HEIGHT	UNDER 8m
RANGE OF DETECT	UNDER 4m :70 m ² OVER 4m ~ UNDER 8m : 35m ²
APPLICATION	HAZARDOUS AREA

27

**EXPLOSION PROOF
TYPE SMOKE DETECTOR**



❖ PRODUCT DRAWINGS



❖ SPECIFICATIONS

MODEL No	FSD
TYPE	EXPLOSION PROOF (Ex d IIC T6)
POWER SOURCE	DC 24V
SIZE/WEIGHT	W138mm x H123mm x D138mm / 1.8Kg
RANGE OF DETECT	UNDER 4m: 150m ² OVER 4m ~ UNDER 20m: 75m ²
APPLICATION	HAZARDOUS AREA

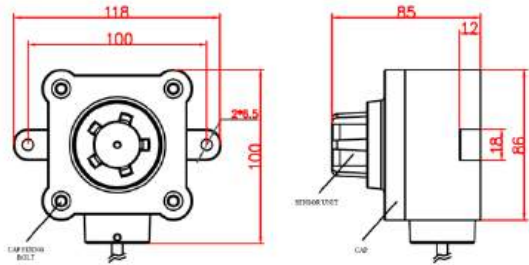
❖ Explosion Proof Type

28

**EXPLOSION PROOF TYPE
GAS MANUAL STATION**



❖ PRODUCT DRAWINGS



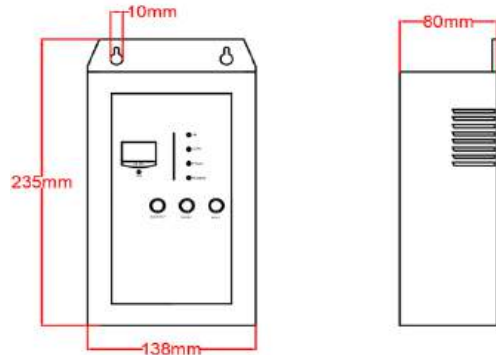
❖ SPECIFICATIONS

MODEL No	EX-301
TYPE	EXPLOSION PROOF (Ex d IIB T4)
MEASURING GAS	COMBUSTIBILITY GAS (LPG, LNG)
POWER SOURCE	DC 12V ~ 24V
OPERATING TEMPERATURE	- 20°C ~ + 50°C
SIZE	W100mm x H118mm x D85mm
APPLICATION	HAZARDOUS AREA

29

**GAS DETECTOR CONTROL
CABINET**

❖ PRODUCT DRAWINGS



❖ SPECIFICATIONS



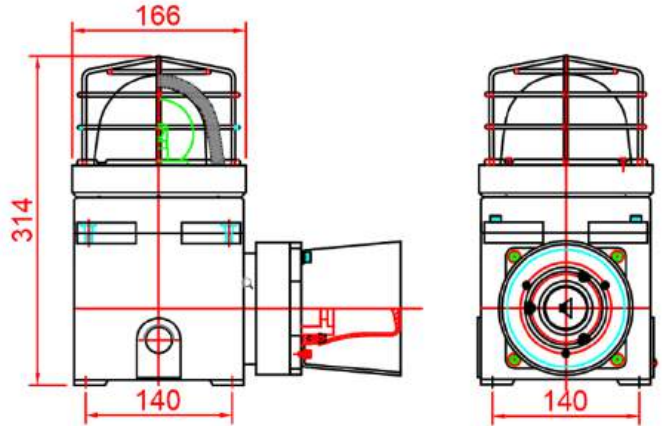
MODEL No	GRD-3000P
POWER SOURCE	AC 100 ~ 240V, 50/60 Hz
POWER CONSUMPTION	2.5W
SIZE	W138mm x H235mm x D80mm
MEASURING GAS	LNG / LPG
OPERATING TEMPERATURE	- 20°C ~ + 40°C
ALARM SOUND	MORE THAN 70dB AT 1m
INDICATOR LIGHT SIGNAL	YELLOW LIGHT (ALARM), RED LIGHT (ERROR), GREEN LIGHT (SOURCE)
APPLICATION	GAS STORAGE, GAS USING STATION, ...

❖ Explosion Proof Type

30

EXPLOSION PROOF TYPE ALARM SIGNAL & SIREN SIGNAL

❖ PRODUCT DRAWINGS



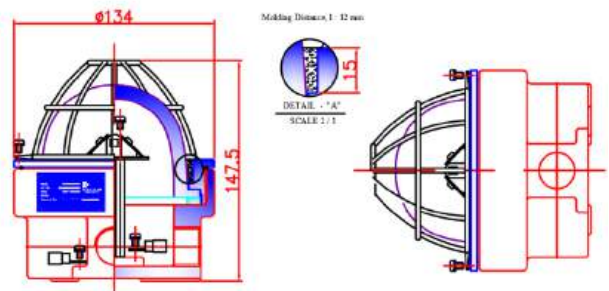
❖ SPECIFICATIONS

MODEL No	FXAL
TYPE	EXPLOSION PROOF (Ex d IIC T6 IP65)
POWER SOURCE	DC 24V
SIZE/WEIGHT	W140mm x H314mm x D309mm / 15Kg
MATERIAL	CASTING ALUMINUM ALLOY IP65
APPLICATION	HAZARDOUS AREA

31

EXPLOSION PROOF TYPE STROBE

❖ PRODUCT DRAWINGS



❖ SPECIFICATIONS

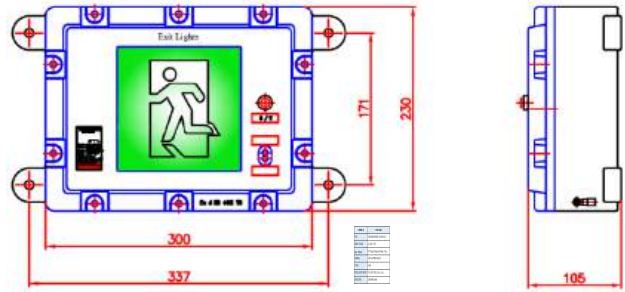
MODEL No	FVA
TYPE	EXPLOSION PROOF (Ex d IIC T6 IP65)
POWER SOURCE	DC 24V
SIZE/WEIGHT	Ø134mm x 147.5mm
APPLICATION	HAZARDOUS AREA

❖ Explosion Proof Type

32 EXPLOSION PROOF TYPE EXIT LIGHTING



❖ PRODUCT DRAWINGS

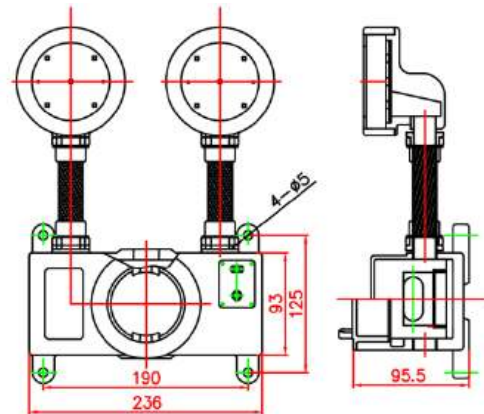


❖ SPECIFICATIONS

MODEL No	FUFL-LED-S
TYPE	EXPLOSION PROOF (Ex d IIB+H ₂ T6)
POWER SOURCE	AC 220V / 4.0W
SIZE/WEIGHT	W337mm x H230mm x D105mm / 8.3Kg
MATERIAL	CAST ALUMINUM ALLOY
COLOR	GRAY
INSTALLATION HEIGHT	ON A FLAT WALL (2.0m ~ 2.5m)
APPLICATION	HAZARDOUS AREA

33 EXPLOSION PROOF TYPE EMERGENCY LIGHTING

❖ PRODUCT DRAWINGS



❖ SPECIFICATIONS

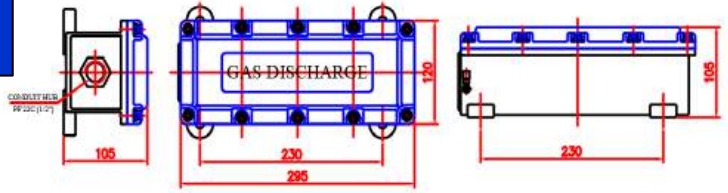
MODEL No	WC-14-3
TYPE	EXPLOSION PROOF (Ex d IIC T6 IP65)
POWER SOURCE	AC 220V
LIGHTING VOLTAGE	4.4V
STANDBY POWER	DC 4.8V, 1300mAh Ni-Cd
APPLICATION	HAZARDOUS AREA

❖ Explosion Proof Type

34

EXPLOSION PROOF GAS DISCHARGE WARNING LIGHT

❖ PRODUCT DRAWINGS



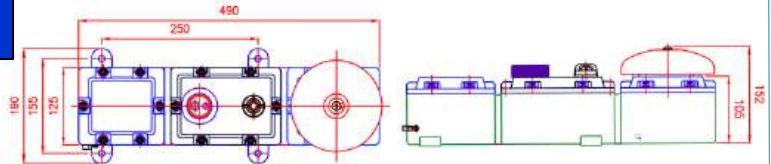
❖ SPECIFICATIONS

MODEL No	FUFL
TYPE	EXPLOSION PROOF (Ex d IIB+H ₂ T ₆) CLOSE ON THE WALL (FLUSH)
POWER SOURCE	DC 24V / 100mA
SIZE/WEIGHT	W295mm x H120mm x D105mm / 4Kg
LIGHTING	LED LIGHTS
MATERIAL	ALUMINUM ALLOY
INSTALLATION HEIGHT	THE HEAD OF THE DOOR
APPLICATION	HAZARDOUS AREA

35

EXPLOSION PROOF TYPE FIRE ALARM MANUAL STATION

❖ PRODUCT DRAWINGS



❖ SPECIFICATIONS

MODEL No	P-2
TYPE	EXPLOSION PROOF (Ex d IIB+H ₂ T ₆) CLOSE ON THE WALL (FLUSH)
CONSIST	MANUAL CALL POINT RATED VOLTAGE: - DC 24V CONTACT RATING CURRENT: - NORMAL - 0mA, - CONTACT - 100mA ALARM BELL RATED VOLTAGE: - DC 24V CONTACT RATING CURRENT: - NORMAL - 0mA, - CONTACT - 50mA SOUND: MORE THAN 90dB AT 1M TERMINAL BOX: - NUMBER OF POLES: 6P 20A - INLET PIPE SIZE: PF 3/4
SIZE/WEIGHT	W190mm x H490mm x D152mm / 9Kg
INSTALLATION HEIGHT	0.8m ~ 1.5m
APPLICATION	HAZARDOUS AREA

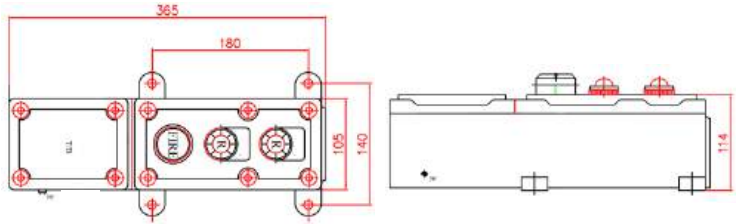
❖ Explosion Proof Type

36

**EXPLOSION PROOF TYPE
GAS MANUAL STATION**



❖ PRODUCT DRAWINGS



❖ SPECIFICATIONS

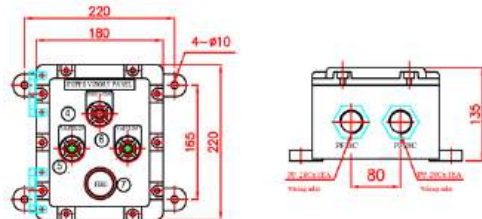
MODEL No	FMS
TYPE	EXPLOSION PROOF (Ex d IIB+H ₂ T6)
POWER SOURCE	DC 24V
SIZE/WEIGHT	W140mm x H365mm x D114mm / 5Kg
CONTACT RATING CURRENT	100mA
INSTALLATION HEIGHT	0.8m ~ 1.5m
APPLICATION	HAZARDOUS AREA

37

**EXPLOSION PROOF TYPE
SVP PANEL**



❖ PRODUCT DRAWINGS



❖ SPECIFICATIONS

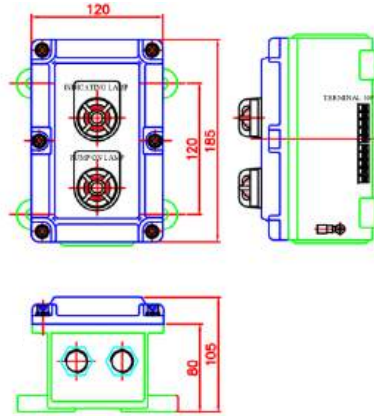
MODEL No	SVP
TYPE	EXPLOSION PROOF (Ex d IIB+H ₂ T6 IP65) CLOSE ON THE WALL (FLUSH)
CONSIST	- POWER INDICATOR RATED VOLTAGE: DC 24V LED COLOR: RED - VALVE CAUTION LAMP RATED VOLTAGE: DC 24V LED COLOR: YELLOW - VALVE DISCHARGE LAMP RATED VOLTAGE: DC 24V LED COLOR: GREEN - TERMINAL BOX NUMBER OF POLES: 10P x 2EA, 20A - INLET PIPE SIZE: PF 3/4 x 2EA, PF 1 x 1EA
SIZE/WEIGHT	W220mm x H220mm x D135mm / 12Kg
INSTALLATION HEIGHT	0.8m ~ 1.5m
APPLICATION	HAZARDOUS AREA

❖ Explosion Proof Type

38 EXPLOSION PROOF PUMP MONITOR LIGHT



❖ PRODUCT DRAWINGS

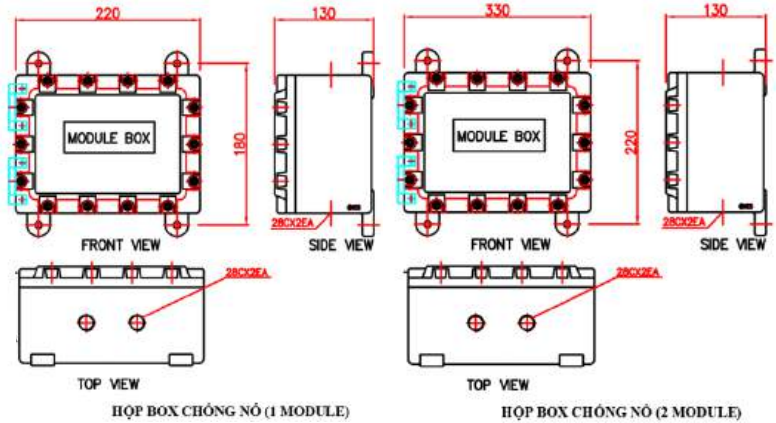


❖ SPECIFICATIONS

MODEL No	FOB-2
TYPE	EXPLOSION PROOF (Ex d IIB+H ₂ T ₆)
SIZE/WEIGHT	W120mm x H185mm x D105mm
APPLICATION	HAZARDOUS AREA

39 EXPLOSION PROOF TYPE JUNCTION & CONTROL BOX

❖ PRODUCT DRAWINGS



❖ SPECIFICATIONS

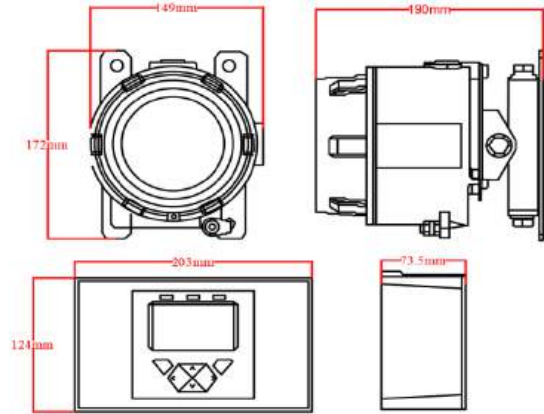
MODEL No	FCJB
TYPE	EXPLOSION PROOF (Ex d IIB+H ₂ T ₆)
COLOR	RED
APPLICATION	HAZARDOUS AREA
SIZE/WEIGHT	CUSTOM MADE

❖ Explosion Proof Type

40 EXPLOSIVE PROOF BEAM SMOKE DETECTOR



❖ PRODUCT DRAWINGS



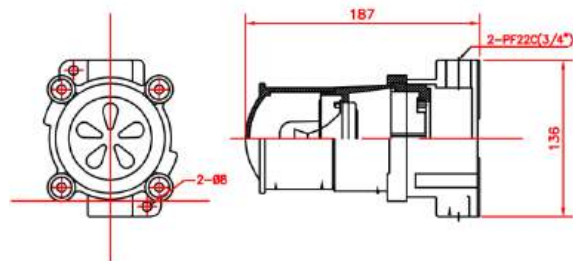
❖ SPECIFICATIONS

MODEL No	FIRERAY 3000 EXD
INSTALLATION HEIGHT	ABOVE 10m
DETECTION RANGE	FROM 5m TO 100m
POWER SOURCE	DC 12 – 36V ± 10%
AMBIENT CONDITION	-10°C TO 55°C
ACCREDITATION	(UL. CE) Ex II 2GD/ Ex db op is IIC T6 Gb/ Ex tb IIIC T85°C Db/ IP.66
APPLICATION	MUSEUM, SPORT ROOM, WORKSHOP ROOM, AIRPORT, EXHIBITION ROOM, BASEBALL, FACTORY, WAREHOUSE,...

41 EXPLOSION PROOF TYPE ELECTRIC SIREN



❖ PRODUCT DRAWINGS



❖ SPECIFICATIONS

MODEL No	FP-FKEX
TYPE	EXPLOSION PROOF (Ex d IIB+H ₂ T6)
POWER SOURCE	DC 24V
SIZE/WEIGHT	H187mm x D136mm / 2Kg
CONTACT RATING CURRENT	400mA
SOUND OUTPUT	90dB AT 1M
INSTALLATION HEIGHT	2m ~ 2.5m
APPLICATION	HAZARDOUS AREA

ADDRESS CONTROL PANEL (R-TYPE) – STANDING TYPE

❖ SPECIFICATION



MODEL No	HIP600W
TYPE	ADDRESS TYPE (R-TYPE) - STANDING TYPE
POWER SOURCE	AC 220V, 50/60Hz
AMBIENT CONDITION	-10°C ~ 50°C, 95% RH
SIZE	W600mm x H2000mm x D600mm
SPECIFICATIONS	TYPE R, AC 220V, LCD DISPLAY, STORED IN DATA FORM TO CHECK THE OPERATION OF FIRE FIGHTING EQUIPMENT (INDOOR, OUTDOOR, SPRINKLER,..) FIRE ALARM (GAS, SMOKE ALARM, HEAT ALARM, BEAM,...)
LOOP	1 LOOP 150 ADDRESS (INPUT: 600 / OUTPUT: 600)
INPUT	16 LOOP x 150 ADDRESSES x 4 INPUTS = 9600 INPUTS
OUTPUT	16 LOOP x 150 ADDRESSES x 4 OUTPUTS = 9600 OUTPUTS
NETWORK	2WIRE TCP/IP, RS485 OR OPTICAL COMMUNICATION
ACCUMULATION TIME	30S-60S
RATED POWER	DC 24V / 15A
STANDBY POWER	DC 24V, 12Ah, Ni-Cd BATTERY
SCREEN	19" LCD (TOUCHSCREEN)
BOX MATERIAL	1.6mm STEEL
WEIGHT	120Kg
COLOR	BLACK

❖ SYSTEM FEATURES

Capable of monitoring and controlling connection addresses with high resolution graphic
 Check the operating position in each area, each location

❖ Performance and management issues

Search by display feature, sound warning
 Stored in Excel file and has print function

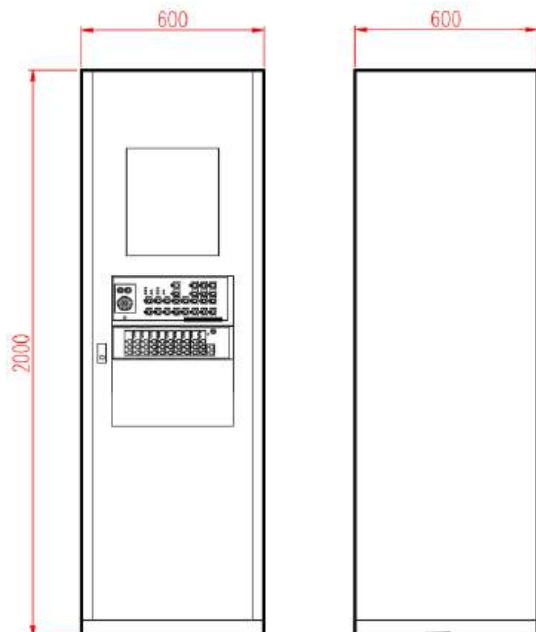
❖ Connect the sub cabinet

Ability to connect multiple sub-cabins
 Simple sub-cabinet connection monitoring

❖ Test function

Check the input and output of each address
 Isolate the input and output of each address
 Control connections per address
 Set density, temperature, Analog sensor address

❖ PRODUCT DRAWINGS



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ADDRESS CONTROL PANEL (R-TYPE) – WALL TYPE

❖ SPECIFICATION



MODEL No	HIP600W
TYPE	ADDRESS TYPE (R-TYPE) - WALL TYPE
POWER SOURCE	AC 220V, 50/60Hz
AMBIENT CONDITION	-10°C ~ 50°C, 95% RH
SIZE	W600mm x H1000mm x D250mm
STANDBY POWER	DC 24V, 12Ah, Ni-Cd BATTERY
RATED POWER	DC 24V / 15A
LOOP	1 LOOP 150 ADDRESS (INPUT: 600 / OUTPUT: 600)
INPUT	16 LOOP x 150 ADDRESSES x 4 INPUTS = 9600 INPUTS
OUTPUT	16 LOOP x 150 ADDRESSES x 4 OUTPUTS = 9600 OUTPUTS
MAXIMUM OF LOOPS	24 LOOP
ACCUMULATION TIME	30S-60S
NETWORK	2WIRE TCP/IP, RS485 OR OPTICAL COMMUNICATION
BOX MATERIAL	1.6mm STEEL
COLOR	BLACK

❖ SYSTEM FEATURES

Capable of monitoring and controlling connection addresses with high resolution graphic
Check the operating position in each area, each location

❖ Performance and management issues

Search by display feature, sound warning
Stored in Excel file and has print function

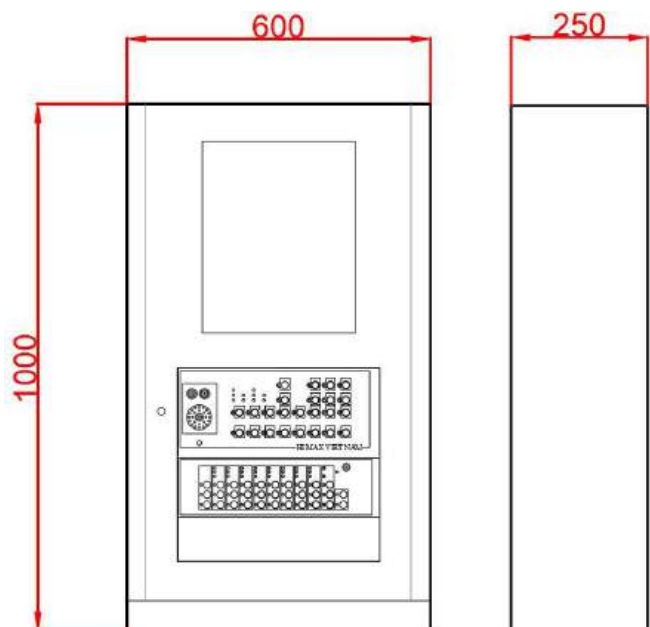
❖ Connect the sub cabinet

Ability to connect multiple sub-cabins
Simple sub-cabinet connection monitoring

❖ Test function

Check the input and output of each address
Isolate the input and output of each address
Control connections per address
Set density, temperature, Analog sensor address

❖ PRODUCT DRAWINGS



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ADDRESS CONTROL PANEL (R-TYPE) – WALL TYPE



SPECIFICATION

MODEL No	HIP600W
TYPE	ADDRESS TYPE (R-TYPE) - WALL TYPE
POWER SOURCE	AC 220V, 50/60Hz
AMBIENT CONDITION	-10°C ~ 50°C, 95% RH
SIZE	W500mm x H800mm x D150mm
RATED POWER	DC24V / 10A
STANDBY POWER	DC 24V, 8Ah, Ni-Cd BATTERY
LOOP	1 LOOP 250 ADDRESSES (INPUT: 1000 / OUTPUT: 1000)
MAXIMUM OF LOOPS	MAX 4 LOOP (INPUT: 4000 / OUTPUT: 4000)
COMMUNICATION METHOD	MODULE: ADDRESS LOCATION / RS485 / CONTROL CENTER: TCP/IP
FIRE ALARM HISTORY	100.000
COLOR	BLACK

SYSTEM FEATURES

Capable of monitoring and controlling connection addresses with high resolution graphic
 Check the operating position in each area, each location

Performance and management issues

Search by display feature, sound warning
 Stored in Excel file and has print function

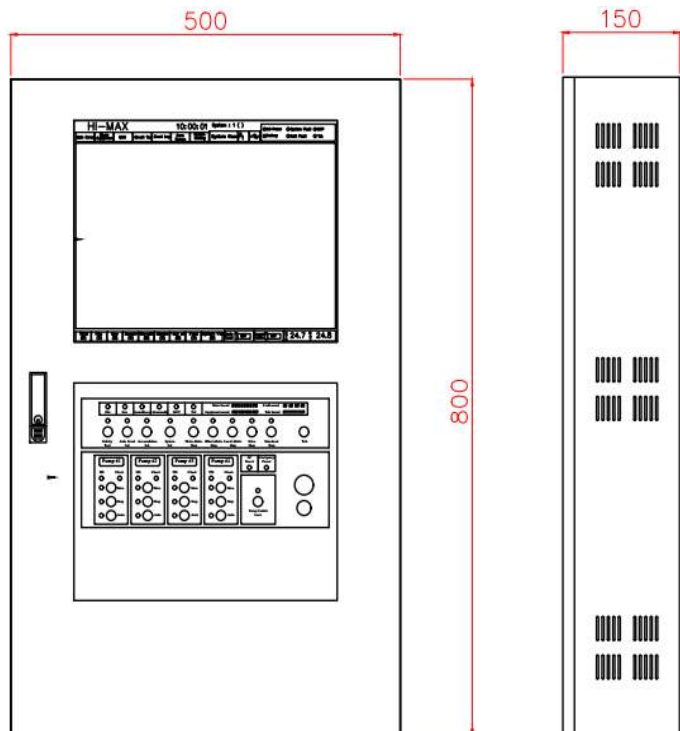
Connect the sub cabinet

Ability to connect multiple sub-cabins
 Simple sub-cabinet connection monitoring

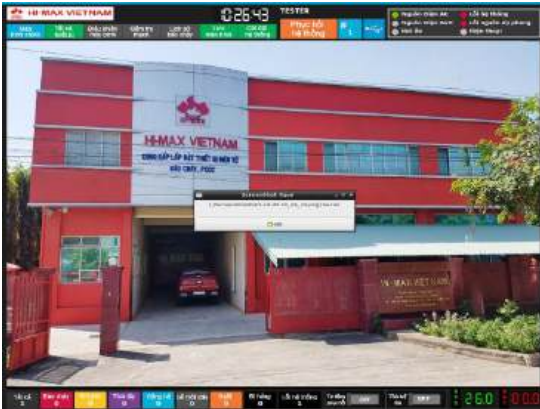
Test function

Check the input and output of each address
 Isolate the input and output of each address
 Control connections per address
 Set density, temperature, Analog sensor address

PRODUCT DRAWINGS



❖ GRAPHIC USER INTERFACE



❖ Screenshot function
Save the current screen image



❖ Control screen
It can stop signals interlocked with the fire signal for a sound device, and each equipment



❖ Fire alarm display screen
Automatically opens the first fire alarm display window



❖ The screen displays the operating status of each module
Each loop module input and output operation status display on the screen

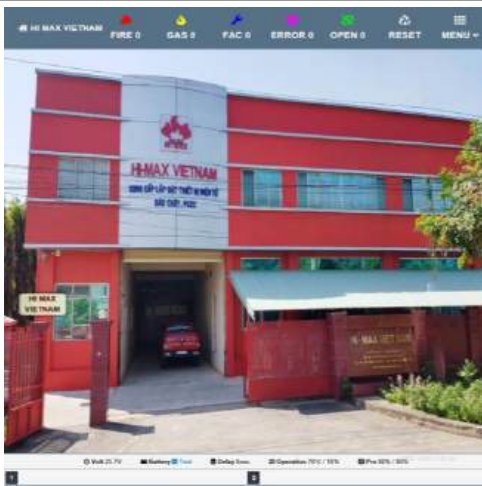


❖ Module circuit operating conditions and test circuits
Module input and output displays the operating status of the facility
Each module test input and output



❖ Operational records display screens
Each problem, date of occurrence search function
Quick check to a representative color display
Printer output function and save excel file

❖ GRAPHIC USER INTERFACE



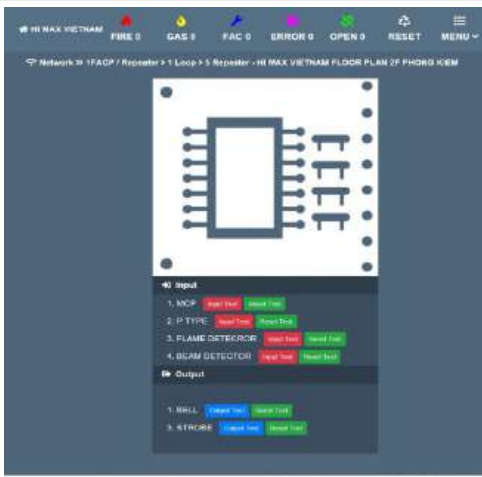
❖ Main display screen

Display company images and feature items that make it easy for users to monitor as well as access



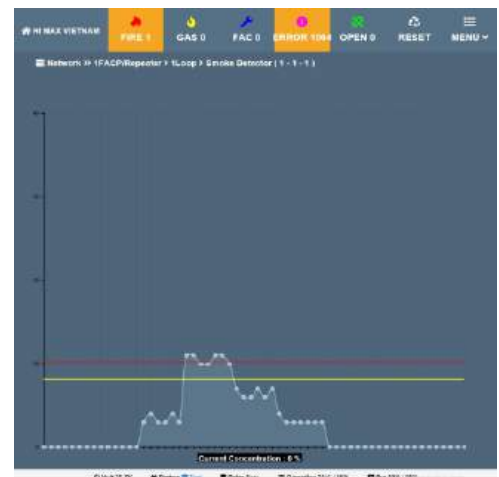
❖ Display the fire alarm screen

Automatically open a window displaying the location on the diagram when a fire alarm signal is received



❖ The screen displays module information

Indicates which fire alarm device the input/output of the module is connected to and the ability to test the circuit



❖ The screen displays sensor information

Indicates the current temperature increase rate or smoke concentration of the fire detector



❖ The screen displays loop information

Indicates the number of addresses on a loop and whether the current address is a detector or module



❖ The screen displays system history

Save system activity information for each specific date and time

OPERATION PRINCIPLES OF ADDRESSED FIRE ALARM SYSTEM (HIP 600W)

ADDRESS TYPE FIRE ALARM



ADDRESSED TYPE FIRE ALARM CENTER CABINE



CONNECT AUXILIARY LOOP CABINET



CONNECT TO 150 EA

NORMAL TYPE FIRE ALARM



FM 200 GAS EXHAUST SYSTEM



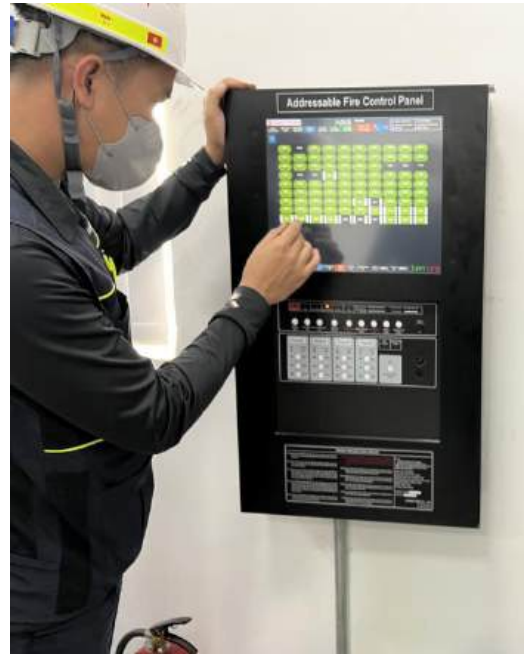
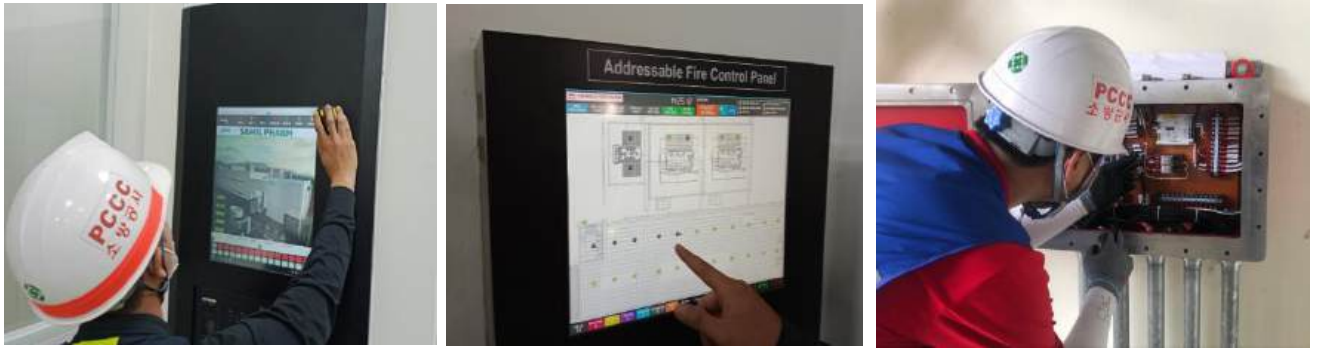
EXPLOSION-PROOF TYPE FIRE ALARM



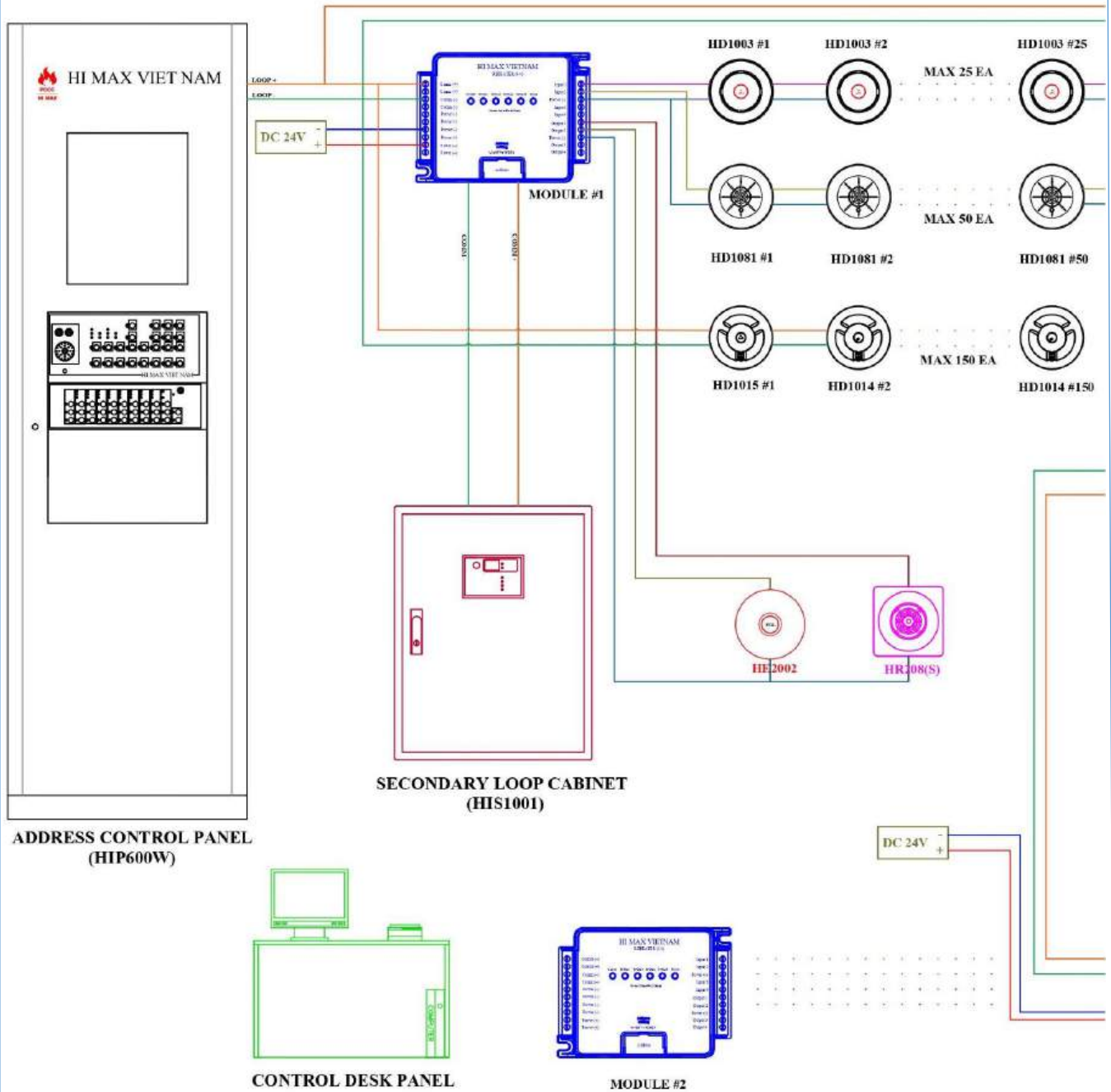
FIRE SYSTEM

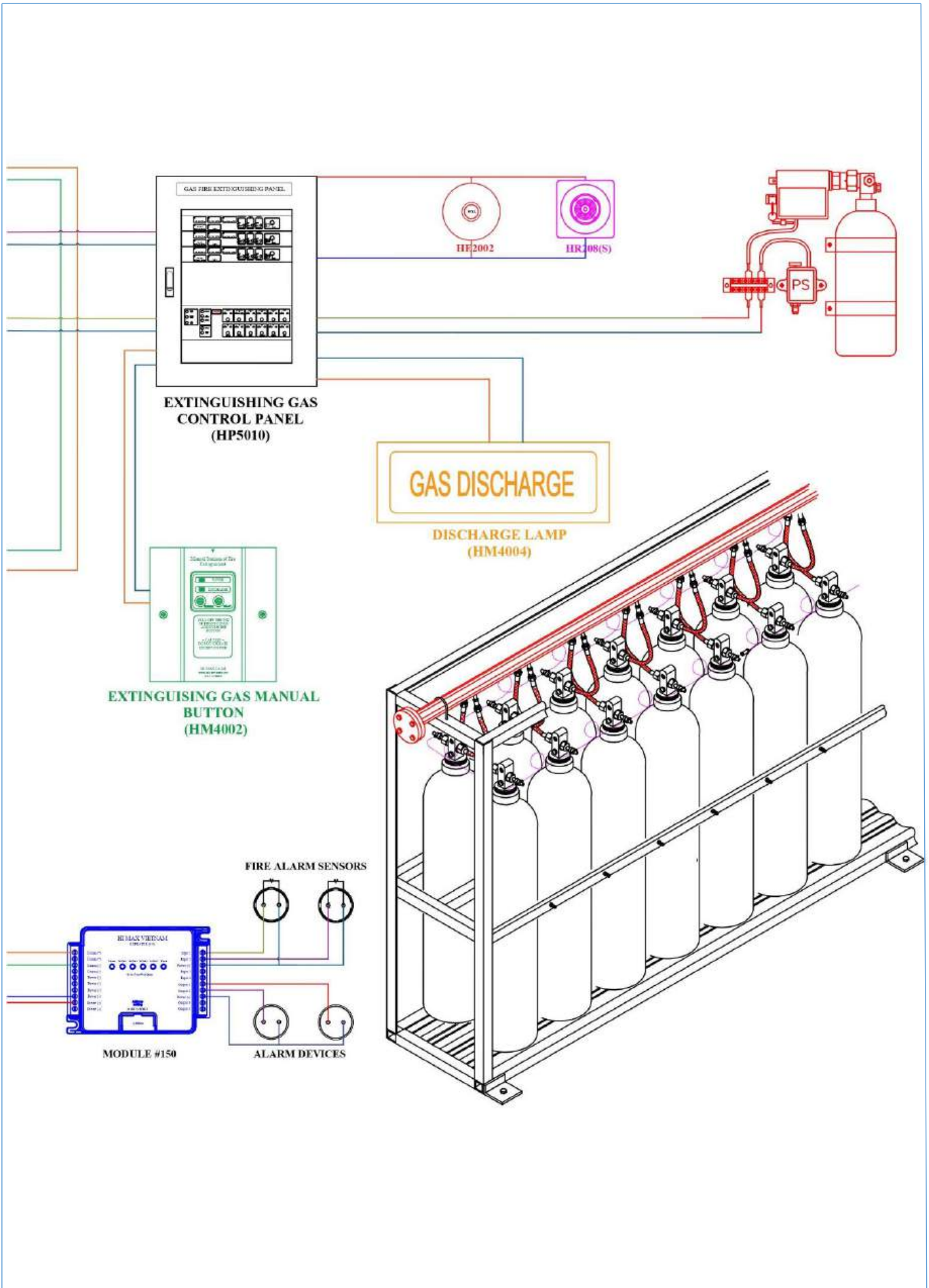


❖ IMAGES OF INSTALLATION AND OPERATION OF R-TYPE ADDRESSAL FIRE ALARM CENTER CABINET



❖ CONNECTION DIAGRAM OF ADDRESSED FIRE ALARM SYSTEM

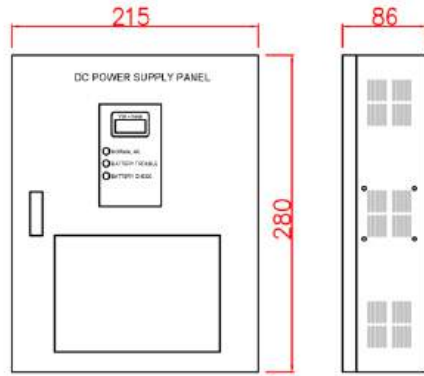
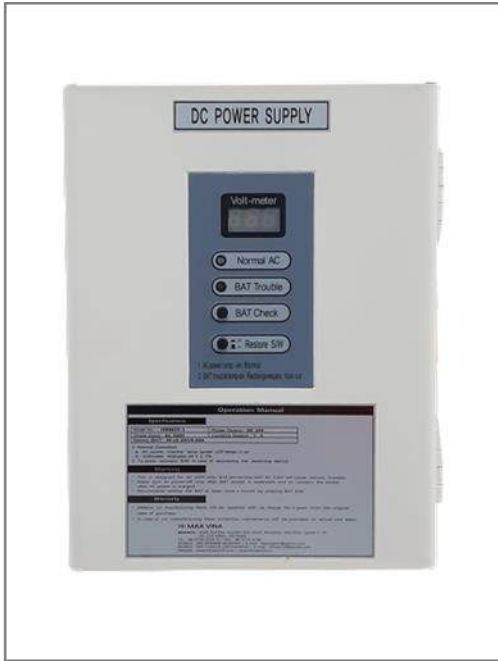




45

DC POWER SUPPLY 24V 5A

❖ PRODUCT DRAWINGS



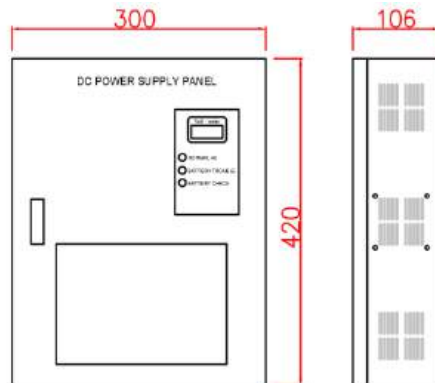
❖ SPECIFICATIONS

MODEL No	HR6023
TYPE	WALL MOUNT
POWER SOURCE	AC 220V, 50/60 Hz
SIZE/WEIGHT	W215mm x H280mm x D86mm / 3Kg
OUTPUT VOLTAGE	DC 24V, 5A
STANDBY POWER	Ni-Cd 24V / 0.6Ah
APPLICATION	SAFETY CENTER WORKS, NEAR CABINET CENTER CONTROL, ...

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DC POWER SUPPLY 24V 15A

❖ PRODUCT DRAWINGS



❖ SPECIFICATIONS

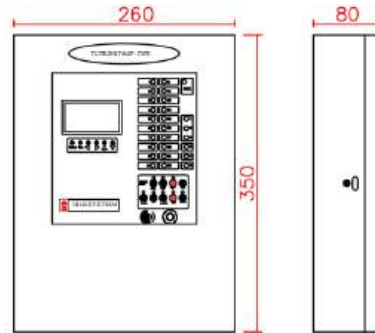
MODEL No	HR6023
TYPE	WALL MOUNT
POWER SOURCE	AC 220V, 50/60 Hz
SIZE/WEIGHT	W300mm x H420mm x D106mm / 7Kg
OUTPUT VOLTAGE	DC 24V, 15A
STANDBY POWER	Ni-Cd 24V / 2.6Ah
APPLICATION	SAFETY CENTER WORKS, NEAR CABINET CENTER CONTROL, ...

47

FIRE ALARM CONTROL PANEL (P-TYPE)



❖ PRODUCT DRAWINGS



❖ SPECIFICATIONS

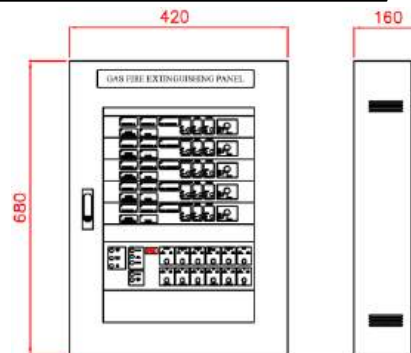
MODEL No	HP5020
POWER SOURCE	AC 220V, 50/60Hz
AMBIENT CONDITION	-10 °C TO 50 °C, 95% RH
CONTROL VOLTAGE	DC 24V
EMERGENCY SOURCES	PIN Ni-Cd 24V / 0.9Ah
MATERIAL/COLOR	STEEL PLATE 1.2t / CUSTOM MADE
POWER CONSUMPTION	125 W
NUMBER OF ZONES	ACCORDING TO CUSTOMER REQUIREMENTS (5 ZONES, 10 ZONES, 20 ZONES, ...)
APPLICATION	BUILDING SAFETY CENTER, SECURITY OFFICE,.....

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EXTINGUISHING GAS CONTROL PANEL



❖ PRODUCT DRAWINGS



❖ SPECIFICATIONS

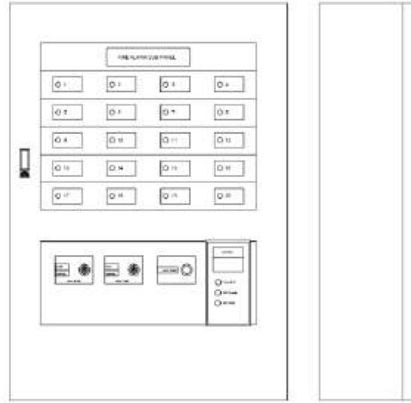
MODEL No	HP5010
POWER SOURCE	AC 220V, 50/60Hz
AMBIENT CONDITION	-10 °C TO 50 °C, 95% RH
CONTROL VOLTAGE	DC 24V
EMERGENCY SOURCES	PIN Ni-Cd 24V / 1.3Ah
MATERIAL/COLOR	STEEL PLATE 1.2t / CUSTOM MADE
POWER CONSUMPTION	125 W
NUMBER OF ZONES	ACCORDING TO CUSTOMER REQUIREMENTS (3 ZONES, 5 ZONES, 10 ZONES, ...)
APPLICATION	BUILDING SAFETY CENTER, CHEMICAL ROOM ,....

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FIRE ALARM SUB PANEL (P-TYPE)



❖ PRODUCT DRAWINGS



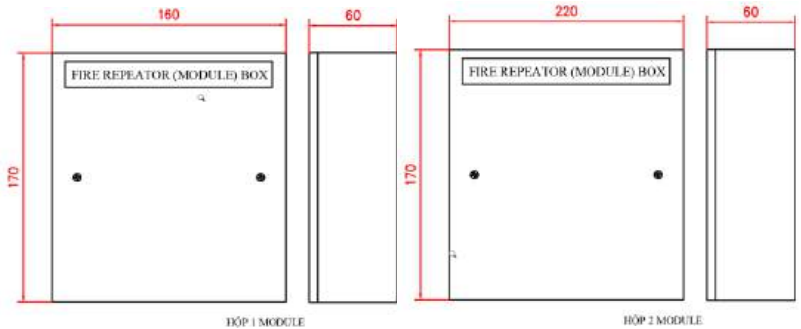
❖ SPECIFICATIONS

MODEL No	HP5020
TYPE	CUSTOM MADE
POWER SOURCE	
SIZE/WEIGHT	
CONTROL VOLTAGE	
STANDBY POWER	
APPLICATION	

50

MODULE BOX

❖ PRODUCT DRAWINGS



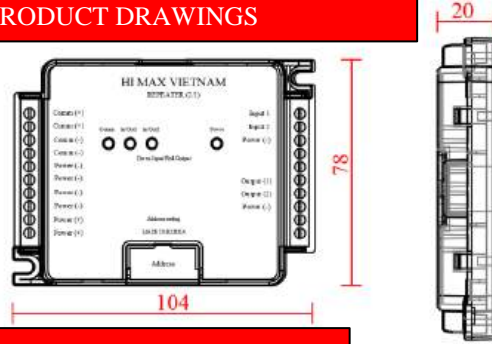
❖ SPECIFICATIONS

MODEL No	HR613	HR613(S)
TYPE	FLAT WALL MOUNT	FLAT WALL MOUNT
SIZE	W160mm x H170mm x D60mm EXPOSED ABS	W160mm x H170mm x D60mm (1 Module) W220mm x H170mm x D60mm (2 Module) COVER W182mm x H193mm
COLOR	GRAY	IVORY
NOTE	ABLE TO INCLUDE REPEATER 1EA	ABLE TO INCLUDE REPEATER 1EA-2EA. MADE TO ORDER: OVER 2EA



51 MODULE 2/2

❖ PRODUCT DRAWINGS

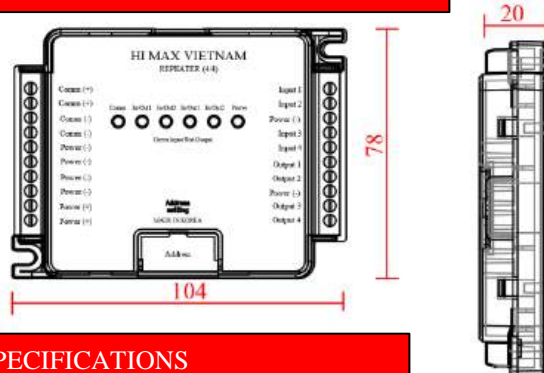


❖ SPECIFICATIONS

MODEL No	HIS602
POWER SOURCE	DC 24V
AMBIENT CONDITION	-10°C ~ 50°C, 95% RH
SIZE/WEIGHT	W104mm x H78mm x D20mm / 100g
TYPE	R-TYPE / ADDRESS
INPUT/OUTPUT	2/2
APPLICABLE LIMITATIONS	FOR ADDRESSABLE FIRE ALARM CENTRAL CABINET
POWER CONSUMPTION	SUPERVISE: 3mA, ACTIVE: 3mA
OUTPUT POWER	DC 24V, 0.8A
CONNECT THE DETECTOR	HEAT DETECTOR: 50 EA/MODULE SMOKE DETECTOR: 25 EA/MODULE

52 MODULE 4/4

❖ PRODUCT DRAWINGS



❖ SPECIFICATIONS

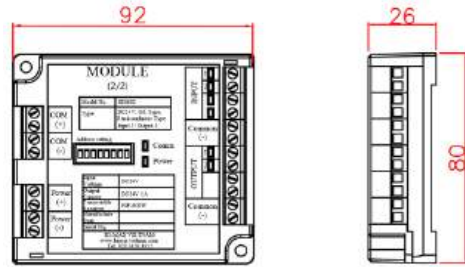
MODEL No	HIS604
POWER SOURCE	DC 24V
AMBIENT CONDITION	-10°C ~ 50°C, 95% RH
SIZE/WEIGHT	W104mm x H78mm x D20mm / 100g
TYPE	R-TYPE / ADDRESS
INPUT/OUTPUT	4/4
APPLICABLE LIMITATIONS	FOR ADDRESSABLE FIRE ALARM CENTRAL CABINET
POWER CONSUMPTION	SUPERVISE: 3mA, ACTIVE: 3mA
OUTPUT POWER	DC 24V, 0.8A
CONNECT THE DETECTOR	HEAT DETECTOR: 50 EA/MODULE SMOKE DETECTOR: 25 EA/MODULE

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MODULE 2/2



❖ **PRODUCT DRAWINGS**

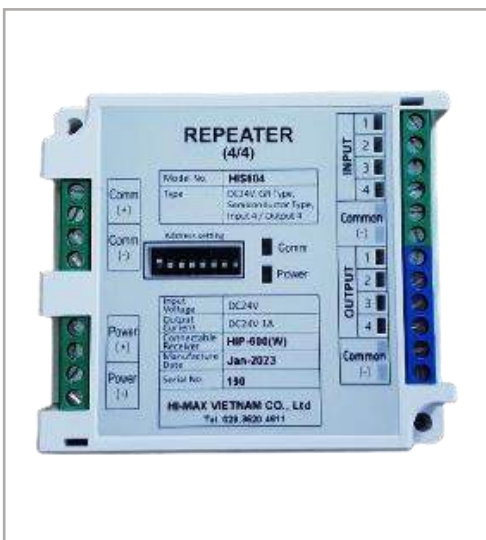


❖ **SPECIFICATIONS**

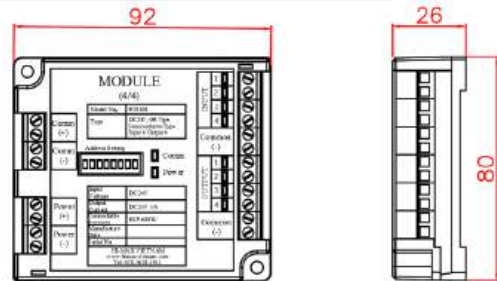
MODEL No	HIS602
POWER SOURCE	DC 24V
AMBIENT CONDITION	-10 °C ~ 50 °C, 95% RH
SIZE/WEIGHT	W92mm x H80mm x D26mm / 130g
TYPE	R-TYPE / ADDRESS
INPUT/OUTPUT	2/2
APPLICABLE LIMITATIONS	FOR ADDRESSABLE FIRE ALARM CENTRAL CABINET
POWER CONSUMPTION	SUPERVISE: 6mA, ACTIVE: 35mA
OUTPUT POWER	DC 24V, 1A
CONNECT THE DETECTOR	HEAT DETECTOR: 50 EA/MODULE SMOKE DETECTOR: 25 EA/MODULE

54

MODULE 4/4



❖ **PRODUCT DRAWINGS**



❖ **SPECIFICATIONS**

MODEL No	HIS604
POWER SOURCE	DC 24V
AMBIENT CONDITION	-10 °C ~ 50 °C, 95% RH
SIZE/WEIGHT	W92mm x H80mm x D26mm / 130g
TYPE	R-TYPE / ADDRESS
INPUT/OUTPUT	4/4
APPLICABLE LIMITATIONS	FOR ADDRESSABLE FIRE ALARM CENTRAL CABINET
POWER CONSUMPTION	SUPERVISE: 24mA, ACTIVE: 70mA
OUTPUT POWER	DC 24V, 1A
CONNECT THE DETECTOR	HEAT DETECTOR: 50 EA/MODULE SMOKE DETECTOR: 25 EA/MODULE

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GAS PACKAGE HOSE REEL



No	PRODUCT NAME	SPECIFICATIONS	BUILT IN GAS WEIGHT (Kg)	NON BUILT IN GAS WEIGHT (Kg)	PROTECTION AREA (m ³)	MODEL NO.
1	HFC-23 (PACKAGE)	30kg x 1BOTTLE	190	160	46.7	HF30-1
2		43kg x 1BOTTLE	203	160	66.9	HF43-1
3		50kg x 1BOTTLE	210	160	77.8	HF50-1
4		86kg x 2BOTTLE	331	245	133.8	HF86-2
5		100kg x 2BOTTLE	345	245	155.6	HF100-2
6	HCFC-BLEND (PACKAGE)	35kg x 1BOTTLE	195	160	56.5	HC35-1
7		50kg x 1BOTTLE	210	160	80.7	HC50-1
8		100kg x 2BOTTLE	345	245	161.5	HC100-2
9	HFC-222ea (FM200) (PACKAGE)	50kg x 1BOTTLE	210	160	67.6	HMF50-1
10		75kg x 1BOTTLE	235	160	101.4	HMF75-1
11		100kg x 2BOTTLE	345	245	135.2	HMF100-2
12		150kg x 2BOTTLE	445	245	202.8	HMF150-2
13	HFC-125 (PACKAGE)	50kg x 1BOTTLE	210	160	71.6	HFC50-1
14		100kg x 2BOTTLE	345	245	143.1	HFC100-2
15	CO ₂ (carbon dioxide) (PACKAGE)	45kg x 1BOTTLE	205	160	45	CO ₂ 45-1
16		90kg x 2BOTTLE	335	245	90	CO ₂ 9-2
17	HOSE REEL CO ₂ (15M)	90kg x 2BOTTLE	335	245	Direct Digestion	CO ₂ H-15

➤ **SPECIFICATIONS & MAIN FUNCTIONS**



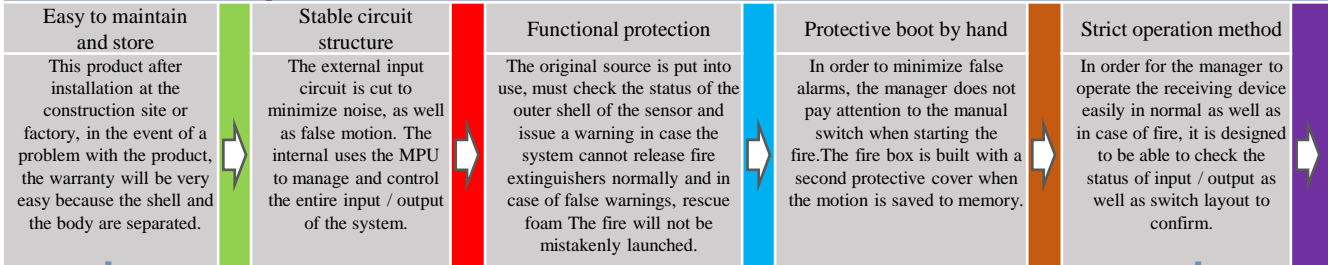
1. Definition and characteristics of automatic fire extinguishing gas system-FM 200

- Automatic fire extinguishing gas system of cabinet type is a device for sensing heat or smoke, which is born from a fire with the structure of components such as sensor, nozzle, hose reel, lamp of powder-containing parts, etc. receiving, operating equipment, automatically emitting under the pressure of the fire-fighting foam towards the fire and in the event of a power failure, after switching to the standby power source will perform the above function.
- The ability to extinguish the fire by the method of effective fire extinguishing, after the fire, there are no leftovers so minimize damage on the equipment.
- When there is a fire, because of fire by automatic fire extinguishing, so even at night, even where there are no people, there is no need to worry.
- On the periphery outside the protective area, install a fire extinguisher by hand so that fire foam can be released outside the door. The cabinet will switch to using backup power (Ni-Cd 24V) when there is a power failure.

2. Specifications

Input	AC220V, 50/60Hz	Backup source	Ni-Cd Battery DC24V/ 600mA
Solenoid valve	DC24V, MAX 1.5A	Pressure switch	DC24V 3A, impact pressure – 5Kg/m ³
Warning output	Warning by sound or electric bell	Product color	White powder coating (EK427K)
Nozzle	Fire extinguishing gas discharge		
Peripherals	Sensor (A, B), manual fire box, indicator light discharge		
Size	1 B/T: W450 x H1900 x D430, 2 B/T: W620 x H1900 x D430		

3. The main function of the product and circuit construction



(In sensor circuit A, B after separate operation within 45 seconds, if other sensor devices do not work, the system can be restored automatically to prevent wrong operation)

**The product is designed after considering factors such as:
Installation place + function + experience + KFI standard**

- ❖ Protection circuit H / W, S / W output solenoid valve is composed of protective device 2 times, the error code generated is indicated in the FND window.
- ❖ Fire alarm: Warning sound and electric bell, capable of using internal DIP S / W according to the installation situation.
- ❖ Ability to store device memory and manage fire (maximum: 250 cases), after connecting to a PC with development management capability via FND export, and batch management.
- ❖ Selectable exhaust time is up to a maximum of 30 seconds, selectable in 10 seconds, and can be checked using the MODE switch.
- ❖ Designed to be able to select the A and B contact points at the terminals in the actuator to use, including the device's own switch.
- ❖ The external wiring terminal is clearly divided in order to facilitate maintenance, storage and arrangement of terminals for convenient construction/ wiring.
- ❖ The input source is AC220V, 50/60Hz, which supplies the entire DC24V, DC5V system through static voltage circuit.
- ❖ AC, DC, PL +, COM-FUSE To protect the product from overloads that are used separately, apply static voltage DC24V, DC5V and FUSE (PS).

❖ AUTOMATIC FIRE EXTINGUISHING GAS SYSTEM-FM 200

- ❖ The standby source uses Ni-Cd DC24V/600mAh, which can indicate 24V, 20V depending on the status of the reserve power, in case the power supply is below 18V, the sensor light of the standby power is on. (Power under 85% 20.4V lamp is turned on)
- ❖ When testing the standby power supply, the status of the standby power status shall be shown to be out, if more than 2 seconds of the standby power switch is pressed, the voltage will be indicated.
- ❖ In case when the normal power of 220V is blocked, when returning to the source, it will automatically switch to the normal power source.
- ❖ Structure of the circuit represents the safety system by the structure of tame semiconductors and intermediate devices.
- ❖ Resistors A, B of the sensor use 10KΩ, the circuit breaker test applies the mutual sensor circuit to the design including the testing position.
- ❖ Application of separate device warnings and switches made to the BEEP sound emitting switch.
- ❖ The signal received from the external input is made up of discontinuous circuits, the circuit structure in order to minimize noise and external interference.

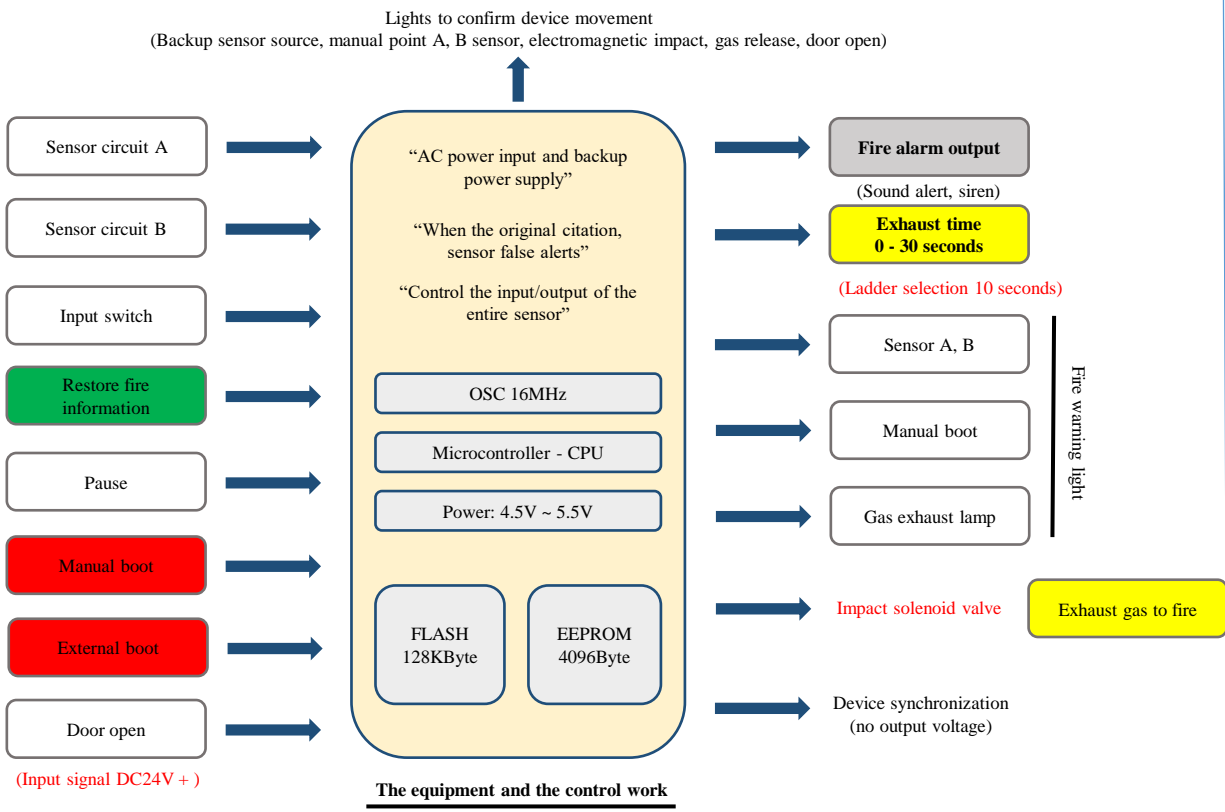
4. Displays operating status and manual starter

- ❖ The display unit has a fire and motion is turned on in the form of an icon, so it is convenient for the manager as well as ensuring visible.
- ❖ Receive sensor signal and manual start signal including basic function and alarm as well as fire indication.
- ❖ When fires occur, the functions effect on some non-voltage contacts of clock device (A, B contacts), gas release, manual start.
- ❖ The sensor input circuit is composed of an A, B replacement circuit, which prevents the release of gas due to an erroneous motion of a circuit, the function of preventing false operation (45 seconds).
- ❖ Manual start switch is constructed to provide double protection against false alarms or false discharges due to false start-up, when the start is stored in memory.

5. Product installation location

- ❖ Install electronic/electrical equipment in each supervisory communication department, generating room, electrical room, computer room for installation in necessary places. Non-conductive extinguishing media.
- ❖ Install in important places (avoiding the 2nd loss caused by fire extinguishing powder), such as museums, libraries, operating rooms.
- ❖ Installation of equipment, semiconductor equipment in the air or can be installed in places where it is necessary to cope with fires in the first place and uninhabited places.

➤ **SYSTEM DIAGRAM**



(Fire data recovery, standby power source, alarm stop, electromagnetic stop, device sync stop, manual start, operation test, auto recovery)

When fire arises, it is possible to check management and storage in EEPROM from time to time. Although all sources as the primary / standby sources are blocked, the information generating fire will be maintained.

❖ AUTOMATIC FIRE EXTINGUISHING GAS SYSTEM-FM 200

➤ PERFORMANCE STATUS AND CONTROL PANEL

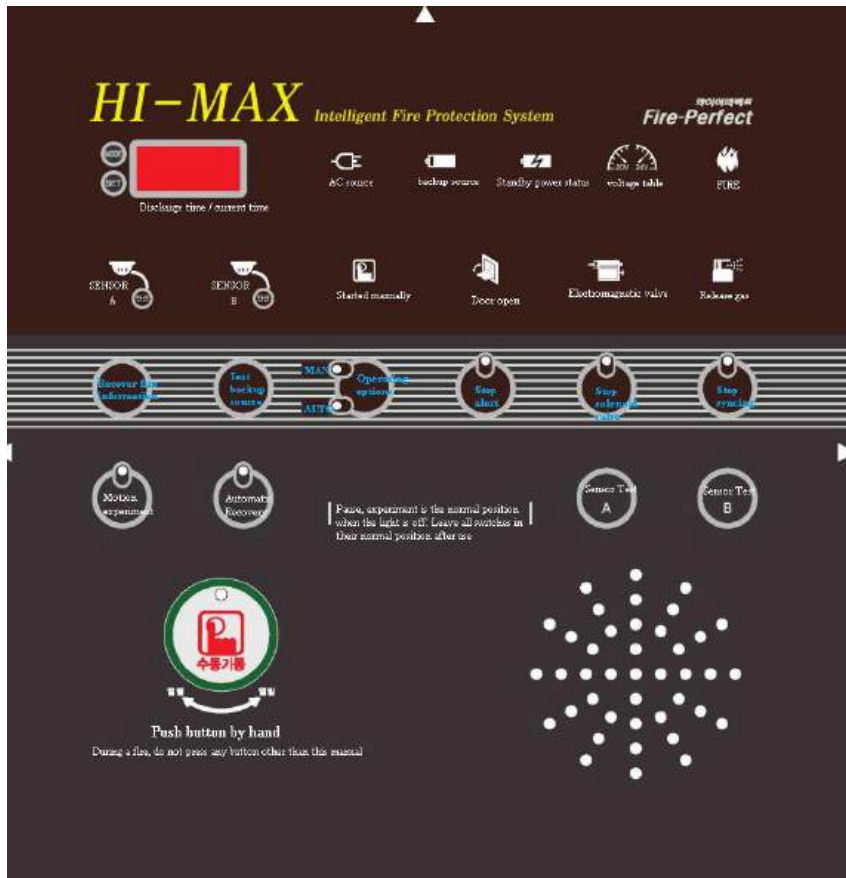


Table showing operating status and control

➤ FUNCTIONAL PERFORMANCE STATUS



When the supply voltage is applied to the AC circuit inside the product, the lamp turns on and receives signals from the contact via the AC/DC change circuit and the lamp is turned on.



When the ac power supply is blocked and when using the power supply for the circuit inside the product using a standby power (DC), the light is on. When a signal is received from a device that transmits signals through an AC/DC change circuit, the light is on. The yellow light of the standby power is on.



The voltage of the backup power (battery) is below 18V or the backup power fails, when the Hughes wire is broken, the light is on, the backup power uses Ni-Cd DC24V/600mAh capacity.



When the power supply for the internal circuit is equal to the alternating current source (AC 220V) and the standby power supply, it indicates the status of voltage, the normal state of 24V, when the 20V lamp is on, it means that the charger is not fully charged and need to be checked. again.



When the sensor circuit motion A, B or when started manually with flashing lights, continuous switching on and off has nothing to do with the off switch.



When the sensor circuit A, B are switched on, the light turns red, and the yellow light sensor line turns off when yellow is broken. Connect the end of the line. Works concurrently with sensor B.



Press the manual start switch on the surface of the fire extinguisher or when pressing the external manual start switch, the light goes on. At the same time, the time of air release and audible warning is about 30s. When the input pauses outside, during movement the lamp will turn on and off in the "flashing" state.



When opening a manual fire extinguisher box outside, there will be a warning sound and the light will turn on. External terminal input signal is (+) 24V.



After manual start-up or sensor circuit A, B if the exhaust time is 30s. At the same time release the solenoid valve, and turn on the light. When the electromagnetic stop, the lamp will turn off. When input pauses (ABORT) outside, the light will turn off, turn on in the state of "flashing".



After manual action or sensor A, B if the solenoid valve is moving, it will receive the input signal from the switch and the light is off. At this time, the light is off.

❖ AUTOMATIC FIRE EXTINGUISHING GAS SYSTEM-FM 200

➤ FUNCTION CONTROL PANEL

Restore Information Data to Fire
After restoring the manual start-up circuit or sensor circuit A and B when the sensor circuit continues to operate irreversibly (When input is more than 3 seconds, there is a system RESET function). After selecting / changing the wrong operation prevention time and room time, if the switch is pressed, "fire information recovery" will be applied.

Test Backup Source
The internal reserve is Ni-Cd DC24V / 600mAh battery and if the standby power test switch is pressed, the AC power is blocked, if the switch is pressed for more than 2 seconds, at the current time table output will show reserve power voltage. For example **24.0**

Operation Mode
When automatically, the sensor circuit A, B move together, the solenoid valve follows the actuator to actuate the fire fighting gas. (When selected, the light goes on).
When using manual sensor circuit A, B simultaneously moves but only emits a siren warning.

Stop Alert
If the switch is pressed, the indicator light flashes (turns on, off), pauses the sound of a warning and siren.

Stop Solenoid Valve
If the switch is pressed, the warning light blinks (on and off) and the solenoid valve does not start. In case, if the stop switch is started by manual start or sensor (A, B), the discharge time is stopped at state **4.00** , If pressed again, it will count to **2.59 2.28**

- ❖ Normal time: Indicates current time. (Does the source blocker still maintain the current time)
- ❖ In case of fire: Indicates the discharge time and after operation, the pressure switch suspends the discharge time.
- ❖ When checking backup power: Indicates the voltage status of standby power. Example **24.0**

Stop Syncing
When the switch is pressed, the indicator light blinks (on, off), and the output with the external synchronization device is stopped.
(Synchronous equipment: FAN, SHUTTER, DAMPER / Contact capacity: below AC250V / 4A).

Impact experiment
After pressing the motion test switch, pressing switches A and B test the circuit, operating the same as the sensor circuit operation. Can check alarm and siren audio output.

Automatic Recovery
After pressing the auto-recovery switch, when the test is active, pressing the circuit test switch, the circuit is operating only for the duration, and it is possible to test the circuit separately. (If pressing for more than 3 minutes in the state of pressing the auto-recover switch and motion testing, the function is restored)

Test circuit A
Used when testing sensor circuits A and B in the state of pressing the test switch to operate. Appears fire alarm and siren, in state sensor A, B solenoid valve turned out so pay attention when doing experiments. Simultaneous motion with circuit experiment B.

Thủ động bằng tay
The experiment operates automatically / manually with uniform movement, when the button starts manually on the surface of the product, after over the delay of launch, the solenoid valve acts to release the extinguishing gas.

MODE
Check **45.0 45.0** . Select the prevention of wrong movement and the launch time selection **3.00**.

SET
Select / change current time.
(selection: slow - short, fast option - long).

➤ FUNCTION CONTROL PANEL

- When the initial power is supplied to the device, automatically check the status of external connection, if the system is in the state of fire release foam as usual, it will display an error code and emit a warning sound.
- Check the error code that is capable of checking at the "Check the error code" attached inside the product and just follow the methods to handle the errors.

- Er.31** External manual control recovery signal is continuously fed. Check the manual control box and extension cord.
- Er.32** The pause signal of the manual control box is continuously loaded. Check the connection.
- Er.33** Pressure switch signals constantly being loaded. Check connection and pressure switch (correct position / OFF)
- Er.34** The state of sensor circuit A, B is in motion. Check wiring and recover fire information.
- Er.35** Temporary stop switch signal (ABORT) and fire information recovery are continuously loaded. Check the connection.
- Er.36** Malfunction of manual start switch input error. Check switches and restore fire information.
- Er.37** Malfunction of manual start switch input error. Check wiring and recover fire information.
- Er.55** S / W DIP selection error and operator input error. Check DIP S / W selection inside PCB.
- Er.99** Error information inside the system Ask the repair company.

➤ WHEN THE FIRE SYSTEM IS FINISHED, THE SOLUTION CHOICE AND THE TIME TO CHOOSE.

- SELECTION OF TIME REPORTER -

FALSE IMPACT PREVENTION SETTING

Launching time 30s Launching time 20s Launching time 10s Launching time 0s

ON OFF

(Use DIP S/W 1.2 times after selecting/changing the launch time is applied if the "fire information recovery" switch is pressed.)

(Use DIP S/W 3 times after selecting/changing the launch time is applied if the "fire information recovery" switch is pressed.)

Select launch delay time with manual start and A, B sensor, select 30s at launch start

❖ AUTOMATIC FIRE EXTINGUISHING GAS SYSTEM-FM 200

❖ Firefighting equipment state and content is over

- ⊗ When the AC power light does not turn on.
- ⊗ When the standby power induction lamp is on.
- ⊗ When the short circuit light is on.
- ⊗ When there is no fire the sensor light / fire light is on.
- ⊗ When there is no fire, the gas discharge lamp comes on.
- ⊗ When the light indicates voltage of 20V.
- ⊗ When there is an abnormality in manual startup motion or sensor.
- ⊗ When there is no sound and siren.
- ⊗ When the solenoid valve fails to start.

❖ Causes and methods of handling

- ✔ Check the status of connection to the source and contact the company.
- ✔ Check the status of standby power and charging.
- ✔ Check sensors cross and connect resistors.
- ✔ Check the sensors together and replace them.
- ✔ Check the pressure switch and replace.
- ✔ Check for standby and abnormal power at source.
- ✔ Check the control box manually and restore fire information.
- ✔ Check the temporary warning switch signal light.
- ✔ Check the pause switch and extension cord.

➤ COMPOSITION IN AND OUT OF PRODUCTS



- The construction consists of a system controller and a power unit.
- Includes alarm sound emitting device and DC24V standby source.
- Use separate AC / standby power switch for checking convenience.



- Composed of protective cover 2 times for manual start.
- Indicates a state of motion that responds quickly and is guaranteed to be seen by the status of the symbol light.



- When connecting terminals, preventive synchronous wires and manual control boxes are divided by color, and provide convenience.
- Separate design control part for maintenance and maintenance.



- Structure of assembling solenoid valve and fire-fighting foam container.
- The discharge tube and valve assembly structure are used.





❖ **AUTOMATIC FIRE EXTINGUISHING GAS SYSTEM-FM 200**

➤ **MANUAL FOR FIRE FIGHTING EQUIPMENT**

**1
NORMAL**

The ac power lamp is on and the indicator voltage in the normal position is 24V (green), which indicates the current time. For example When the AC power supply is blocked (When the power is turned off), the AC power light is off and the power light is turned on. In the operation selected switch state, if the "auto" or "manual" light is on, the status is normal.

AUTO

When the A, B circuit switches on the sensor and emits an external siren warning signal, an audible warning is also issued. At this time, the FND time motion indicates from  to , after the completion of the motion solenoid valve and release the extinguishant gas, if the pressure switch is in motion, gas discharge lamp lights fire extinguishing, current time paused.

**2
FIRE**



MAN

Leave the control switch in the "manual" state to open the bottom cover, press the manual start switch, at the same time move the A, B sensor circuit, emit a warning sound, after the timer movement, , release fire fighting gas. While the lamp movement in the signboard indicates the manual start is on. (When selecting manually, the motion of A, B sensor, counter launch time without movement)


MACHINES

When all electric devices fail to start, open the lid of the box, after removing the safety cover of the solenoid valve, emphasize the PUSH and fire fighting gas will be released. (After checking the control board circuit must be controlled)


**3
RESERVE
SOURCE**

Standby power inside the Ni-Cd battery DC24V.600mAh, if the standby power supply switch is pressed, the AC power is blocked, in case the switch is pressed for more than 2 seconds, at the current time output system in the display panel , indicates status of standby power voltage. For example  . At this time, in the table below  , you must check the battery backup or not fully charged.

**4
SWITCH**

- Stop warning: When there is a fire, use it to stop the alarm with sound or siren and the light of the switch will flash.
- Electromagnetic stop: Used to stop the start of the solenoid valve when starting manually or when moving the sensor. For example .
- Stop syncing: Stop output for syncing external devices when starting manually or with a sensor (A, B). (When moving the pressure switch, synchronizing output device and siren, gas discharge lamp turns on.)

**5
EXPERI
MENTAL
SWITCH**

- Motion test: After pressing test switch A, B, it is possible to conduct the same test as the motion of the sensor
 - Automatic recovery: If the switch is pressed, the sensor automatically recovers, it is possible to conduct the movement status of a separate circuit. (in the state at most automatic switch and motion test, if more than 3 minutes will restore function).
- Note: When conducting the motion test, if the FND counter is in the state , avoid touching the solenoid valve.

**6
CHOOSE
A TIME**

- How to set and change the current time: Using the "SET" switch can select and change the time. (After selection can save automatically)



Short press: Slow selection / Long press: Quick selection.

**7
THE TEST
FUNCTION**

- This product automatically switches to standby power when power failure, every 3 months please check standby power.
- During the inspection, pay attention to the place where the foam is kept and the solenoid valve. After separating the solenoid valve, valve cover and safety pin, conduct the experiment.
- All switches that stop when the LED signal is turned off in the normal position, after using certain must put the switch to a fixed position.

**8
MEMORY
FUNCTION**

- When moving A / B sensor, electromagnetic motion, external start, manual start, pressure switch, fire information recovery, prevention of wrong movement (45 seconds) will split into year / month / day - hour / minute / second to save to memory, after the manager can check the system
- Can be checked via the current time (FND Window) in the field or connected with information cable and PC

❖ **AUTOMATIC FIRE EXTINGUISHING GAS SYSTEM-FM 200**

➤ **ORDER INSTALLATION FIRE EQUIPMENT AND INTERNAL STRUCTURE**

1) Installation of fire extinguishing system equipment

It is necessary to avoid installation in an uneven or sloped, certain place to fix fire fighting equipment to the floor.

2) Connect the power cord to an external device

When connecting to the terminal, it is required to use the specified electrical wire according to fire regulations, usually using company's products such as manual control box, ejection indicator light, electronic siren, etc. , products of different companies are then tested to see if they are suitable or not

(3) Equipment containing fire extinguishers

Containers containing fire-fighting foam when releasing high pressure should be firmly installed and not moved.

(4) Flexible mounting

Flexible is a rigid connection device to maintain tightness to prevent gas leakage by connecting the discharge heads together as an F-shape of a fire-fighting foam container.

(5) Attach electronic valve and needle valve

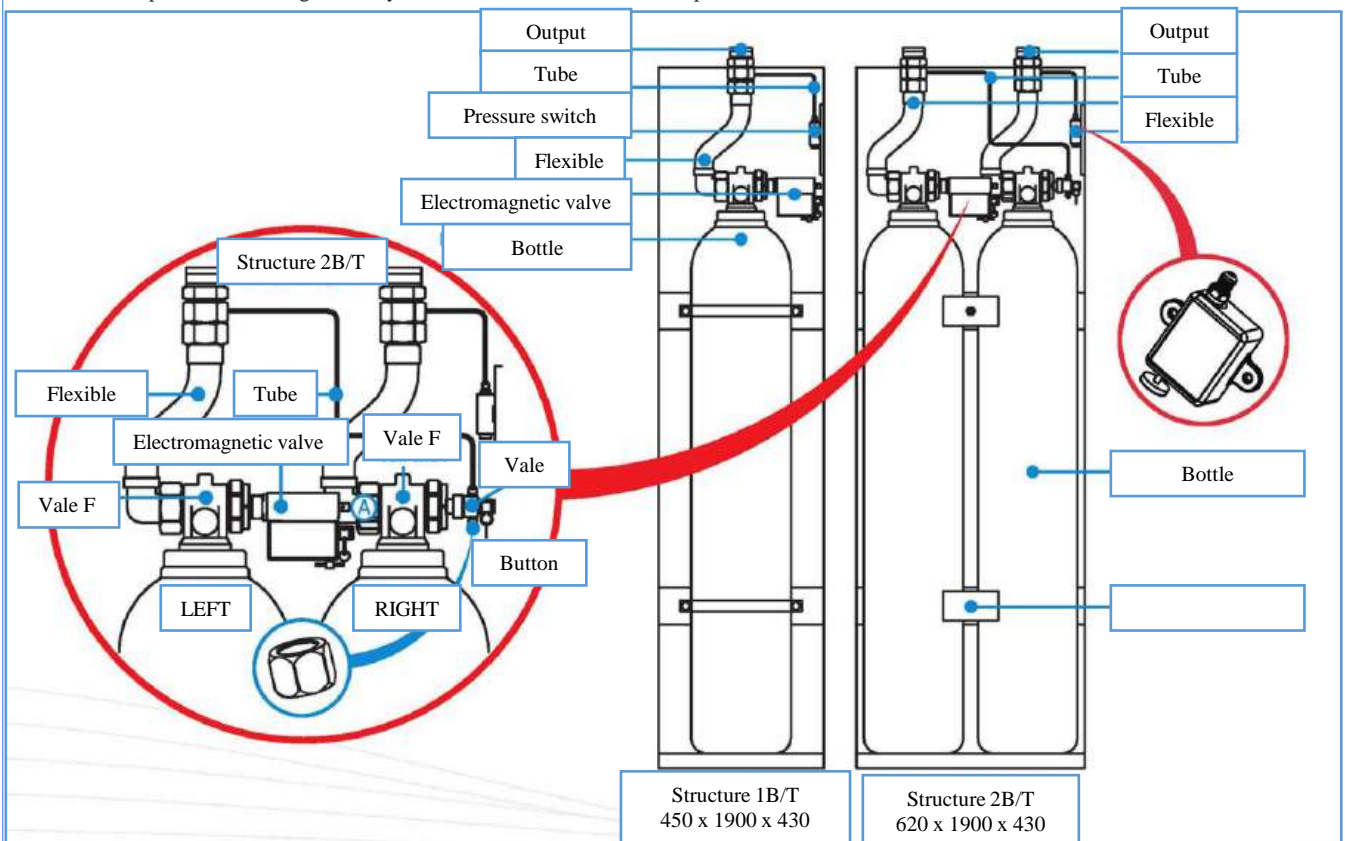
After attaching (A) safety latch to the electronic valve, the F-shaped of the fire-fighting foam reservoir (Left) is attached to the valve. Needle valve is only used 2B / T, fire-fighting foam reservoir (Right) after sticking with the F-valve, one side is attached to the falling part of the pipe above the left end, the other side is used to prevent plugging.

(6) Automatic fire extinguishing equipment

Turn on the power switch, check the status of the light on, the motion status of the switch, the motion status of the sensor. Conduct audible alarm test, output siren, synchronized with external equipment. After completion of the motion test, all switches must return to the normal position (the signal light must be turned off).

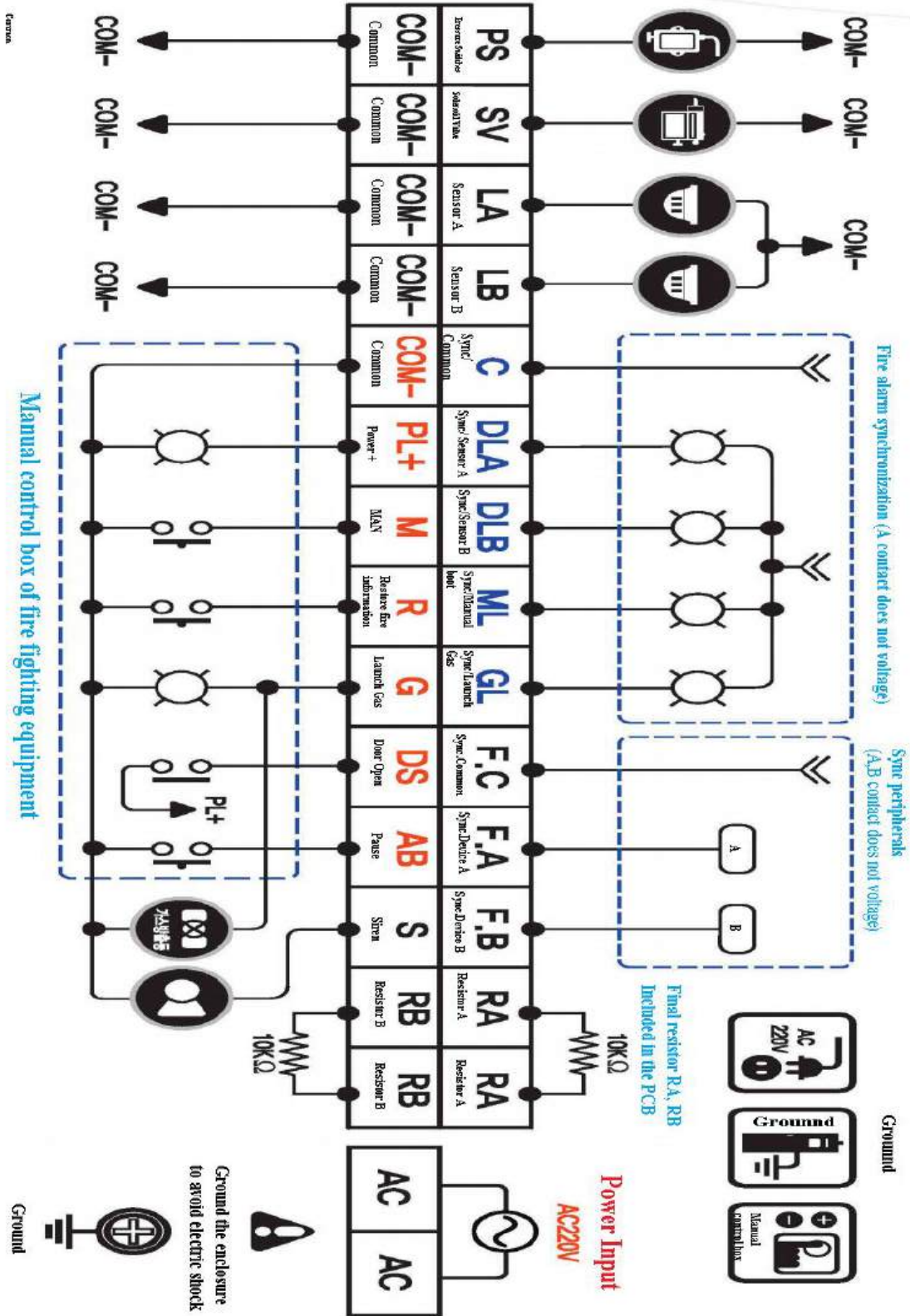
(7) Complete installation and things to note

After checking the light indicating the movement of the fire-fighting equipment, checking if the switches are back to their normal position, removing the safety valve of the solenoid valve is complete.



AUTOMATIC FIRE EXTINGUISHING GAS SYSTEM-FM 200

INSTALLING THE TERMINAL WIRE

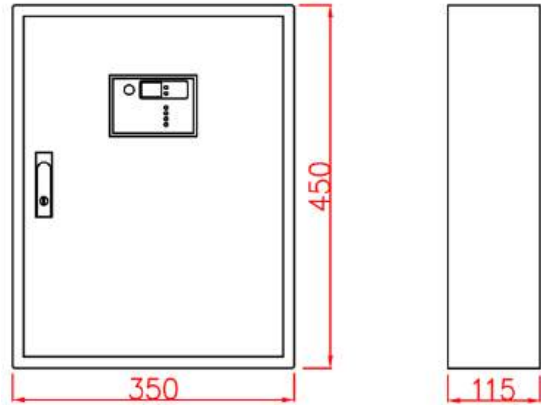


*In sensor (LA, LB) apart from the sensor, never connect to any other wire. Could be causing a wrong launch

57 SECONDARY LOOP CABINET



❖ PRODUCT DRAWINGS



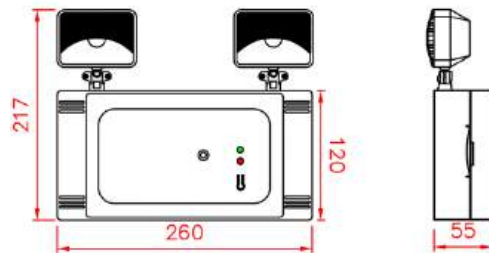
❖ SPECIFICATIONS

MODEL No	HIS1001
TYPE	GR (ADDRESS)
INSTALLATION	WALL MOUNTING TYPE
POWER SOURCE	AC 220V, 50/60Hz
AMBIENT CONDITION	-10°C ~ 50°C, 95% RH
SIZE	W350mm x H450mm x D115mm
STANDBY POWER	DC 24V 4Ah (DC12V 4Ah x 2EA)
MAXIMUM LOOP	MAX 4 LOOP (IN 4.000 CCT / OUT 4.000 CCT)
COLOR	CUSTOM MADE
APPLICATION	BUILDING SAFETY CENTER, NEAR PANEL BOARD, ...

58 EMERGENCY LIGHTING



❖ PRODUCT DRAWINGS



❖ SPECIFICATIONS

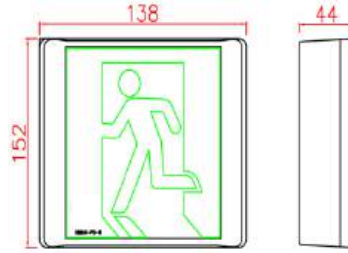
MODEL No	KOREA
TYPE	LED LIGHTS
POWER SOURCE	AC 220V, 50/60Hz
STANDBY POWER	400 mAh x 3.6V (Ni-Cd)
SIZE/WEIGHT	W260mm x H217mm x D55mm / 592g
STANDBY TIME	120 MINUTES
POWER CONSUMPTION	2W

59

EMERGENCY EXIT LIGHTING (SMALL)



❖ PRODUCT DRAWINGS



❖ SPECIFICATIONS

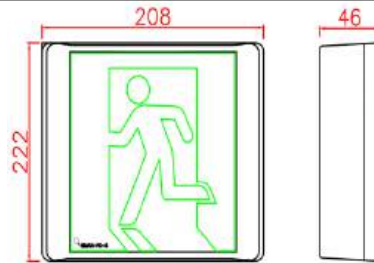
MODEL No	HL3111	HL3111-1
TYPE	SMALL (SIDE)	SMALL (BOTH SIDES)
POWER SOURCE	AC 220V / 2.2W	AC 220V / 2.2W
SIZE/WEIGHT	W138mm x H152mm x D44mm / 0.5Kg	W197mm x H174mm x D81mm / 1.1Kg
STANDBY POWER	4.8V, 600mAh Ni-Cd BATTERY	4.8V, 600mAh Ni-Cd BATTERY
STANDBY TIME	120 MINUTES	120 MINUTES
INSTALLATION HEIGHT	ON THE DOOR/CEILING	CEILING
APPLICATION	KITCHEN, BOILER ROOM, WELDING WORKSHOP, DRYING ROOM, SEWAGE DISPOSAL PLANT, PROJECTION ROOM, CONFERENCE ROOM, KARAOKE, BASEMENT, TERMINAL, WAREHOUSE, RESTAURANT, DEPARTMENT STORE, HOTEL ROOM, COMPUTER ROOM, ...	

60

EMERGENCY EXIT LIGHTING (MEDIUM)



❖ PRODUCT DRAWINGS



❖ SPECIFICATIONS

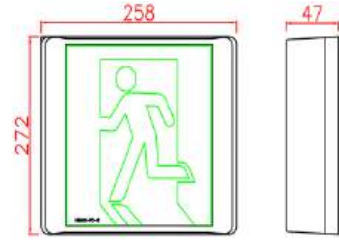
MODEL No	HL3113	HL3113-1
TYPE	MEDIUM (SIDE)	MEDIUM (BOTH SIDES)
POWER SOURCE	AC 220V / 3.9W	AC 220V / 3.9W
SIZE/WEIGHT	W208mm x H222mm x D46mm / 1.25Kg	W266mm x H245mm x D80mm / 1.3Kg
STANDBY POWER	4.8V, 600mAh Ni-Cd BATTERY	4.8V, 600mAh Ni-Cd BATTERY
STANDBY TIME	120 MINUTES	120 MINUTES
INSTALLATION HEIGHT	ON THE DOOR/CEILING	CEILING
APPLICATION	KITCHEN, BOILER ROOM, WELDING WORKSHOP, DRYING ROOM, SEWAGE DISPOSAL PLANT, PROJECTION ROOM, CONFERENCE ROOM, KARAOKE, BASEMENT, TERMINAL, WAREHOUSE, RESTAURANT, DEPARTMENT STORE, HOTEL ROOM / COMPUTER ROOM, ...	

61

EMERGENCY EXIT LIGHTING (LARGE)



PRODUCT DRAWINGS



SPECIFICATIONS

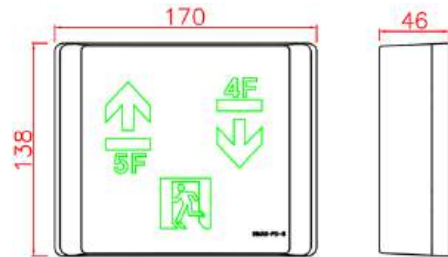
MODEL No	HL3119	HL3119-1
TYPE	LARGE (SIDE)	LARGE (BOTH SIDES)
POWER SOURCE	AC 220V / 6.6W	AC 220V / 6.6W
SIZE/WEIGHT	W258mm x H272mm x D47mm / 1.5Kg	W316mm x H295mm x D80mm / 1.5Kg
STANDBY POWER	4.8V, 600mAh Ni-Cd BATTERY	4.8V, 600mAh Ni-Cd BATTERY
STANDBY TIME	120 MINUTES	120 MINUTES
INSTALLATION HEIGHT	ON THE DOOR/CEILING	CEILING
APPLICATION	KITCHEN, BOILER ROOM, WELDING WORKSHOP, DRYING ROOM, SEWAGE DISPOSAL PLANT, PROJECTION ROOM, CONFERENCE ROOM, KARAOKE, BASEMENT, TERMINAL, WAREHOUSE, RESTAURANT, DEPARTMENT STORE, HOTEL ROOM, COMPUTER ROOM, ...	

62

EMERGENCY EXIT LIGHTING (TYPE OF DIRECTION)



PRODUCT DRAWINGS



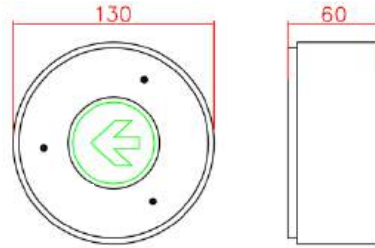
SPECIFICATIONS

MODEL No	HL3117
TYPE	DIRECTIONS (SIDE, BOTH SIDES)
POWER SOURCE	AC 220V / 3.7W
SIZE/WEIGHT	W170mm x H138mm x D46mm / 430g
STAND-BY POWER	4.8V, 600mAh Ni-Cd BATTERY
STANDBY TIME	120 MINUTES
INSTALLATION HEIGHT	OVER 1m
APPLICATION	KITCHEN, BOILER ROOM, WELDING WORKSHOP, DRYING ROOM, SEWAGE DISPOSAL PLANT, PROJECTION ROOM, CONFERENCE ROOM, KARAOKE, BASEMENT, TERMINAL, WAREHOUSE, RESTAURANT, DEPARTMENT STORE, HOTEL ROOM, COMPUTER ROOM, ...

**63 EMERGENCY EXIT LIGHTING
(TYPE OF DIRECTION)**



❖ PRODUCT DRAWINGS



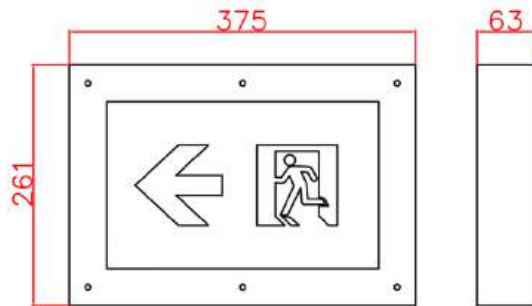
❖ SPECIFICATIONS

MODEL No	HL3022
TYPE	TYPE OF UNDERFLOOR DIRECTIONS (FLOOR FLUSH)
POWER SOURCE	AC 220V / 3.8W
SIZE/WEIGHT	Ø130mm x D60mm
LIGHTING	HIGHT BRIGHTNESS LED
STANDBY TIME	120 MINUTES
INSTALLATION HEIGHT	ON THE FLOOR (FLUSH)
APPLICATION	CONFERENCE ROOM, RESTAURANT, DEPARTMENT STORE, THEATER, MUSEUM, GALLERY,...

**64 EMERGENCY EXIT LIGHTING
(TYPE OF DIRECTION)**



❖ PRODUCT DRAWINGS



❖ SPECIFICATIONS

MODEL No	HL3081
TYPE	TYPE OF UNDERFLOOR DIRECTIONS (FLOOR FLUSH)
POWER SOURCE	AC 220V / 3.8W
SIZE/WEIGHT	W375mm x H261mm x D63mm
STANDBY POWER	4.8V, 600mAh Ni-Cd BATTERY
STANDBY TIME	120 MINUTES
INSTALLATION HEIGHT	ON THE FLOOR (FLUSH)
APPLICATION	CONFERENCE ROOM, RESTAURANT, DEPARTMENT STORE, THEATER, MUSEUM, GALLERY, SUBWAY, ...

65

EMERGENCY EXIT LIGHTING (MEDIUM)



❖ **PRODUCT DRAWINGS**



❖ **SPECIFICATIONS**

MODEL No	KT-610/KT-620
TYPE	MEDIUM (SIDE, BOTH SIDES)
POWER SOURCE	AC 220V, 50/60Hz
SIZE/WEIGHT	W397mm x H157mm x D30mm / 1.3Kg
STANDBY POWER	3.6V, 700mAh Ni-Cd BATTERY
STANDBY TIME	120 MINUTES
INSTALLATION HEIGHT	CEILING/ON THE FLOOR
APPLICATION	KITCHEN, BOILER ROOM, WELDING WORKSHOP, DRYING ROOM, SEWAGE DISPOSAL PLANT, PROJECTION ROOM, CONFERENCE ROOM, KARAOKE, BASEMENT, TERMINA, WAREHOUSE, RESTAURANT, DEPARTMENT STORE, HOTEL ROOM, COMPUTER ROOM, ...

66

EMERGENCY EXIT LIGHTING (MEDIUM)



❖ **PRODUCT DRAWINGS**



❖ **SPECIFICATIONS**

MODEL No	KT-650/KT-660
TYPE	MEDIUM (SIDE, BOTH SIDES)
POWER SOURCE	AC 220V, 50/60Hz
SIZE/WEIGHT	W420mm x H187mm x D26mm / 1.3Kg
STANDBY POWER	3.6V, 700mAh Ni-Cd BATTERY
STANDBY TIME	120 MINUTES
INSTALLATION HEIGHT	CEILING/ON THE FLOOR
APPLICATION	KITCHEN, BOILER ROOM, WELDING WORKSHOP, DRYING ROOM, SEWAGE DISPOSAL PLANT, PROJECTION ROOM, CONFERENCE ROOM, KARAOKE, BASEMENT, TERMINAL, WAREHOUSE, RESTAURANT, DEPARTMENT STORE, HOTEL ROOM, COMPUTER ROOM, ...

67-68-69

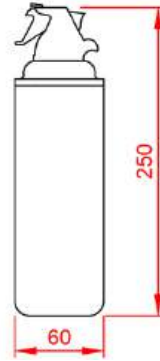
SPRINKLER HEADS

MODEL No	TYPE	OPERATING TEMPERATURE	GLASS BULB COLOR	PRESSURE	MATERIAL	PRODUCT
	UPRIGHT	68 °C, 93 °C	RED, GREEN	2,5MPa (25 kg/cm ²)	BRASS	
SPK	PENDENT	68 °C, 93 °C	RED, GREEN	2,5MPa (25 kg/cm ²)	BRASS	
	FLUSH TYPE	72 °C		2,5MPa (25 kg/cm ²)	BRASS	

Explosion Proof Type

70 PORTABLE FIRE EXTINGUISHER

PRODUCT DRAWINGS



SPECIFICATIONS

MODEL No	HF16-1
TYPE	PORTABLE FIRE EXTINGUISHER FOR CAR, OFFICE, HOUSE, SCHOOL,...
WEIGHT	400g
TYPE OF CHEMICAL	HCFC-123

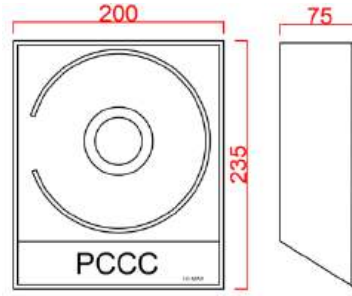
71 FIRE EXTINGUISHER

FIRE EXTINGUISHER CO ₂	FIRE EXTINGUISHER BC POWDER	FIRE EXTINGUISHER ABC POWER
SPECIFICATIONS	SPECIFICATIONS	SPECIFICATIONS
Type: CO ₂ Weight: 3Kg / 5Kg / 24Kg	Type: BC Powder Weight: 4Kg / 8Kg / 35Kg	Type: ABC Powder Weight: 4Kg / 8Kg / 35Kg
CẦU CHỮA CHÁY	SPECIFICATIONS	
	Type: Powder BC / Power ABC Weight :6Kg / 8Kg	

72 FIRE EXTINGUISHER BASE



❖ PRODUCT DRAWINGS



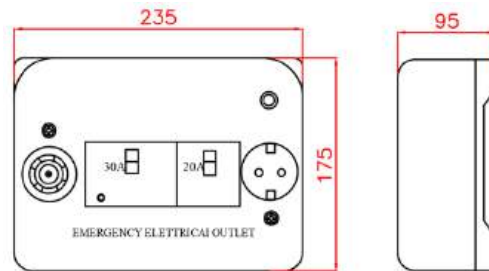
❖ SPECIFICATIONS

MODEL No	PCCC
ORIGIN	KOREA
SIZE	W200mm x H235mm x D75mm
WEIGHT	180g
CHARACTERISTIC	CAN BE USED FOR FIRE EXTINGUISHERS OF 5KG OR LESS

73 EMERGENCY POWER OUTLET



❖ PRODUCT DRAWINGS



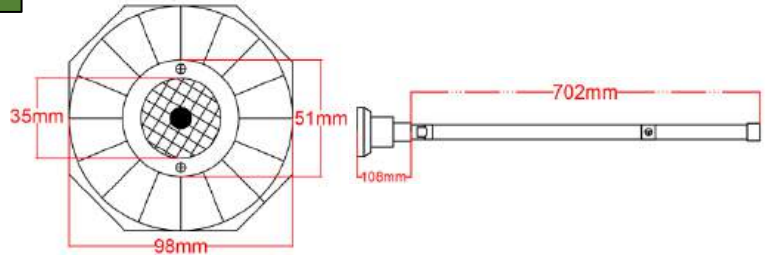
❖ SPECIFICATIONS

MODEL No	HM4013
POWER INDICATING LAMP	1 PHASE 220V, 3 PHASE 380V
AMBIENT CONDITION	-10°C ~ 50°C, 95% RH
SIZE / WEIGHT	W235mm x H175mm x D95mm / 1.6Kg
SWITCHES	3 PHASE - 3P 30AF / 30AT 1 PHASE - 2P 20AF / 20AT
SOCKETS	3 PHASE - 3P 460V / 30A
APPLICATION	OFFICE, BASEMENT, TERMINAL, WAREHOUSE, CHURCH, RESTAURANT, DEPARTMENT STORE, HOTEL, COMPUTER ROOM, CONFERENCE ROOM, KARAOKE, ...

❖ Equipment for testing and disassembling fire detectors

74 SMOKE AND HEAT DETECTOR TESTING DEVICE

❖ PRODUCT DRAWINGS

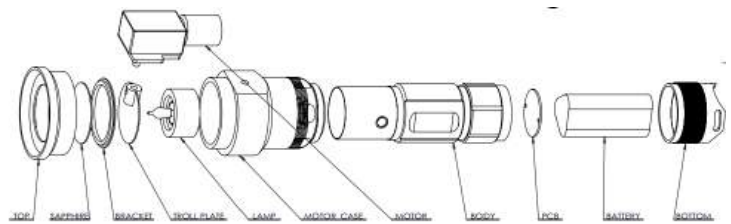


❖ SPECIFICATIONS

MODEL No	SL-HS-119CA
ORIGIN	KOREA
WEIGHT	1.5 Kg
BATTERIES	LITHIUM - ION
CHARGING INDICATOR LIGHT	RED LIGHT BATTERY CHARGING / GREEN LIGHT FULLY CHARGED
CHARGE TIME	2 – 3 HOURS
BATTERY OPERATION TIME	100 MINUTES
INCLUDE	SMOKE NOZZLE, ONE 0.9M MAIN HEAD, TWO 1.1M EXTENSIONS, CHARGER, SMOKE TANK

75 FIRE DETECTOR TESTING DEVICE

❖ PRODUCT DRAWINGS



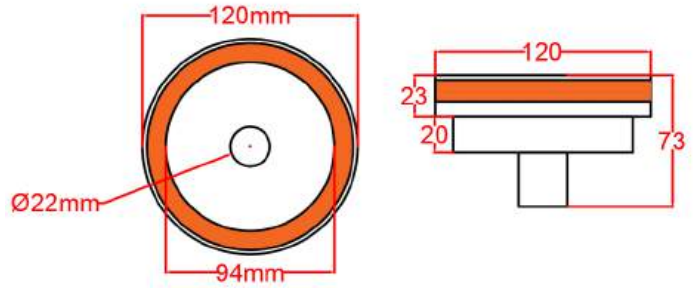
❖ SPECIFICATIONS

MODEL No	IRGQ2
ORIGIN	KOREA
OPERATIONAL DISTANCE	FROM 1m TO 3m
LAMP	HALOGEN
CHARGE TIME	3 HOURS
APPLICATION	CHECK THE OPERATION OF THE FIRE DETECTOR
ADVANTAGES	COMPACT, EASY TO USE

76

SMOKE AND HEAT DETECTOR INSTALLATION AND REMOVAL EQUIPMENT

❖ PRODUCT DRAWINGS

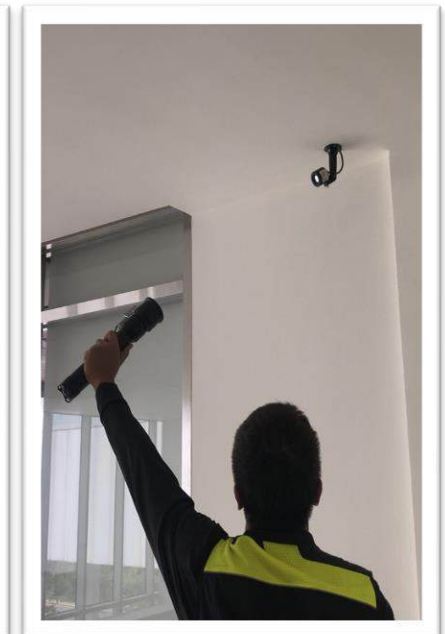


❖ SPECIFICATIONS

MODEL No	DS-AD119
ORIGIN	KOREA
LENGTH	1m, 5m, 7.5m
WEIGHT	200g
SIZE OF INSTALLATION HEAD	OUTSIDE DIAMETER: 120 mm INSIDE DIAMETER: 94 mm DEEP: 73 mm
ADVANTAGES	CAN CHOOSE SUITABLE FOR THE HEIGHT OF EACH DETECTOR, EASILY REMOVE AND INSTALL SMOKE AND HEAT DETECTORS OF DIFFERENT BRANDS



❖ Product experimental images



❖ SCHEMATIC DIAGRAM

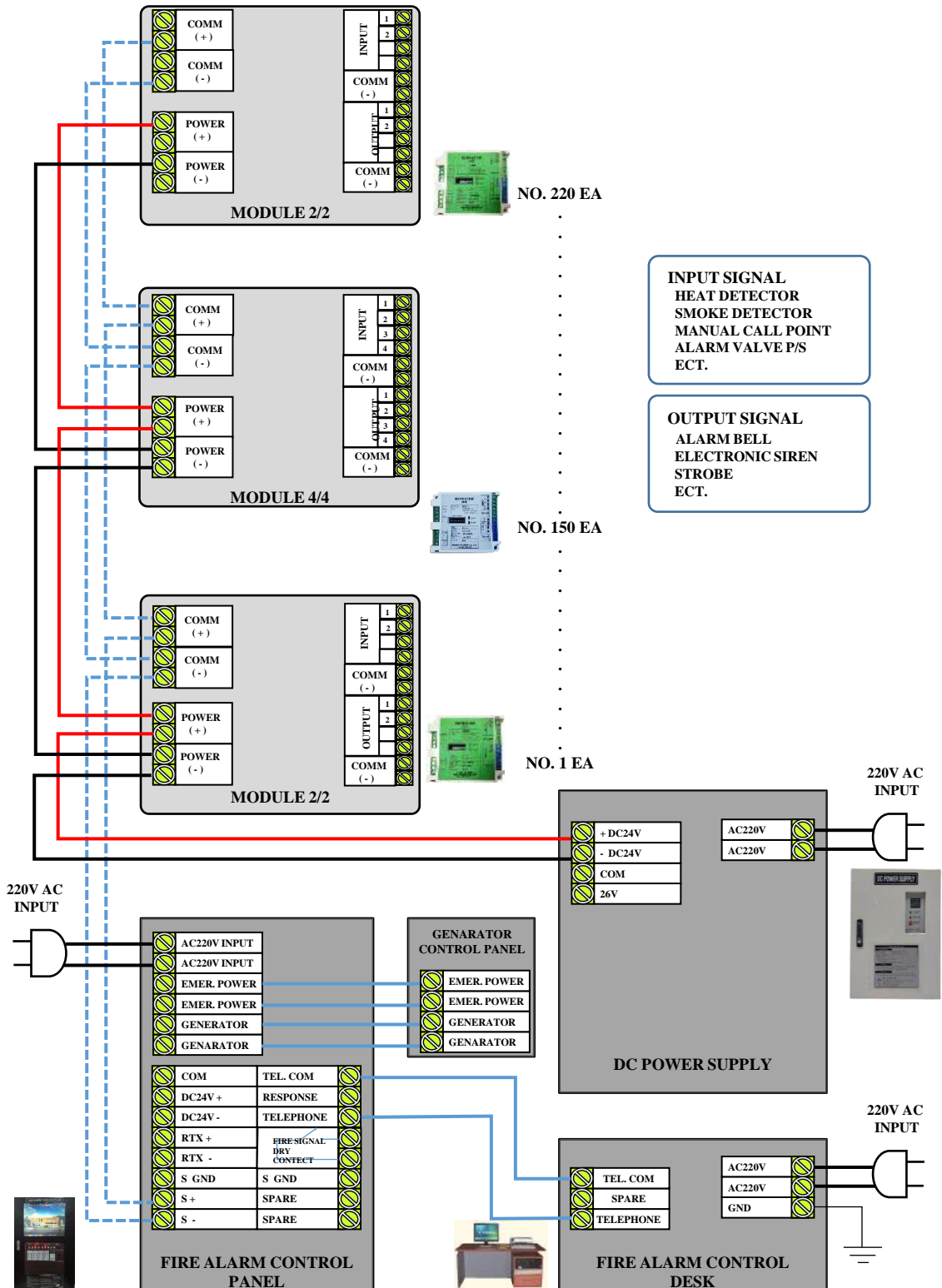
No	SCHEMATIC DIAGRAM	PAGE
1	R – TYPE - FIRE ALARM SYSTEM	64
2	R – TYPE - FIRE ALARM SYSTEM	65
3	R – TYPE - FIRE ALARM MANUAL CALL POINT	66
4	R – TYPE - FIRE ALARM MANUAL CALL POINT	67
5	R – TYPE - BELL, LAMP, RISE OF RATE HEAT DETECTOR	68
6	R – TYPE - NORMAL DETECTOR	69
7	R – TYPE - ANALOG DETECTOR	70
8	R – TYPE - BEAM DETECTOR	71
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17	R – TYPE - MODULE & ANALOG DTECTOR ADDRESS TABLE	80
18	EXPLANATION OF TERMINOLOGIES FIRE-RELATED	81
19	COMPARISON COMMUNICATION METHOD	81



❖ SCHEMATIC DIAGRAM

1 R – TYPE - FIRE ALARM SYSTEM

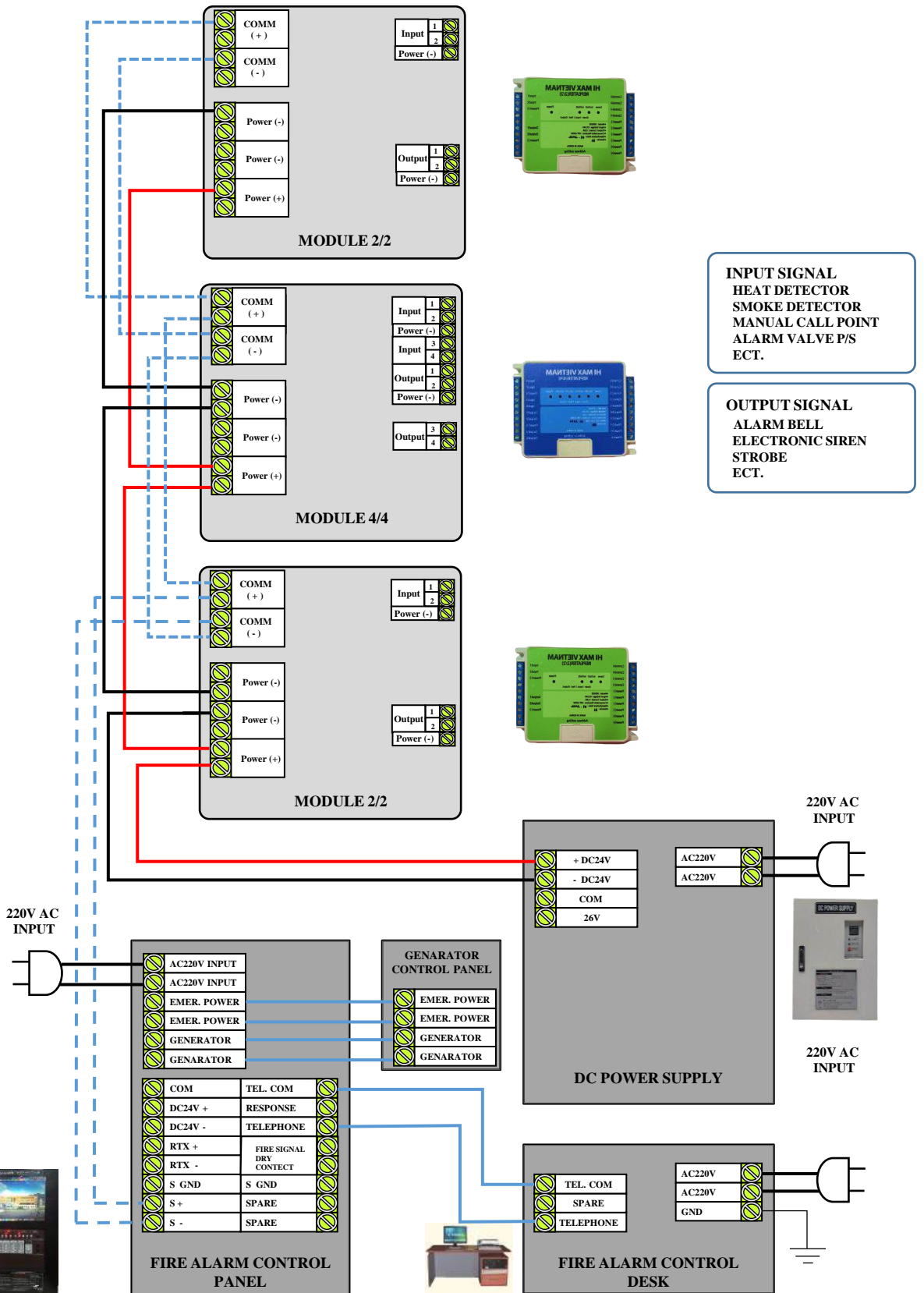
MODULE & FIRE CONTROL PANEL



❖ SCHEMATIC DIAGRAM

2 R – TYPE - FIRE ALARM SYSTEM

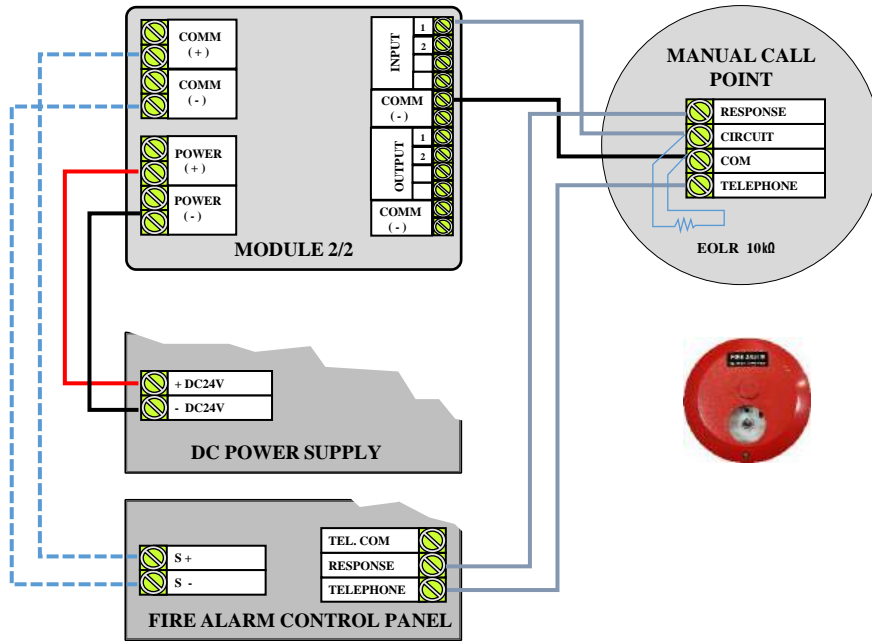
MODULE & FIRE CONTROL PANEL



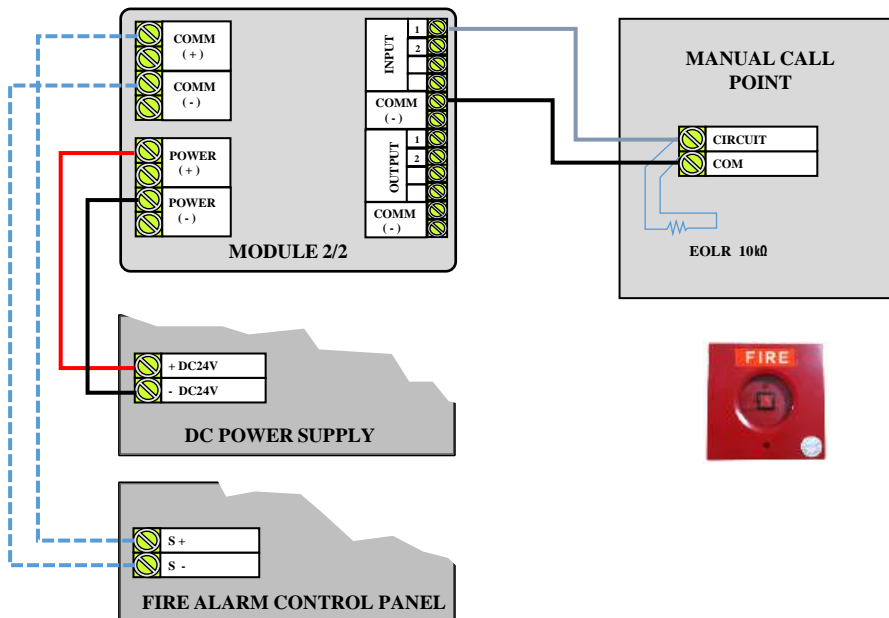
❖ SCHEMATIC DIAGRAM

3 R – TYPE - FIRE ALARM MANUAL CALL POINT

CIRCLE TYPE MANUAL CALL POINT



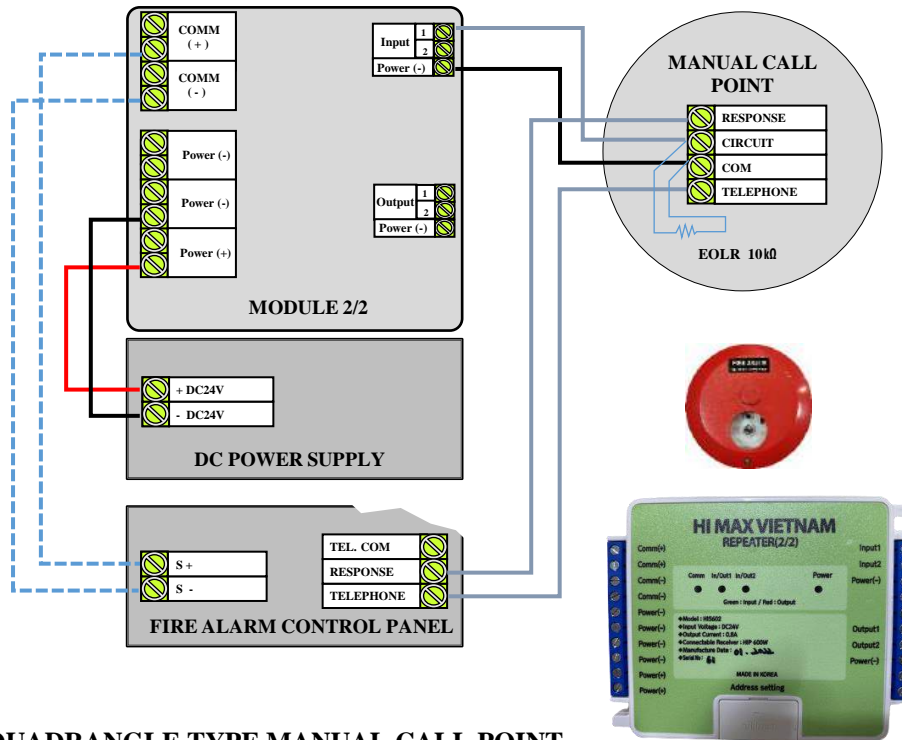
QUADRANGLE TYPE MANUAL CALL POINT



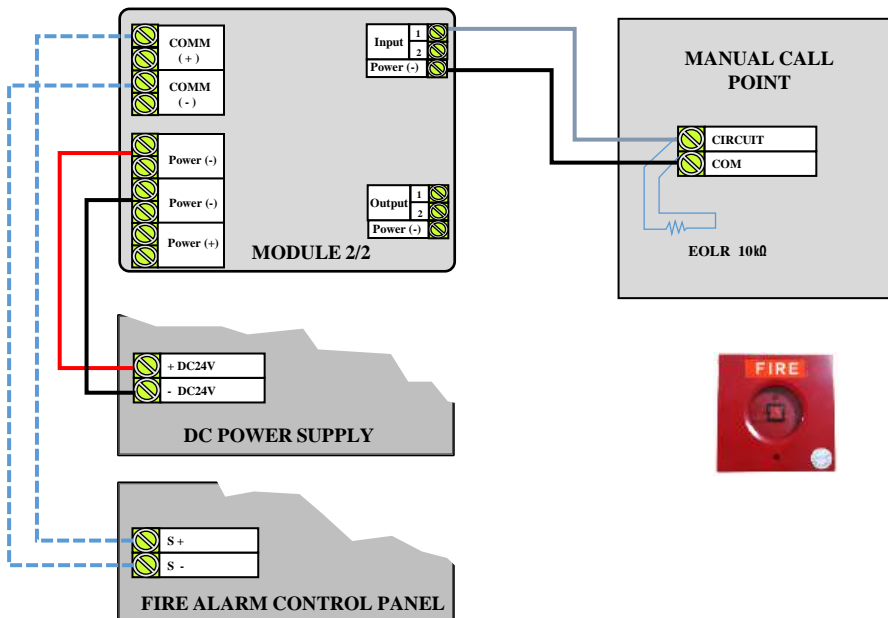
❖ SCHEMATIC DIAGRAM

4 R – TYPE - FIRE ALARM MANUAL CALL POINT

CIRCLE TYPE MANUAL CALL POINT



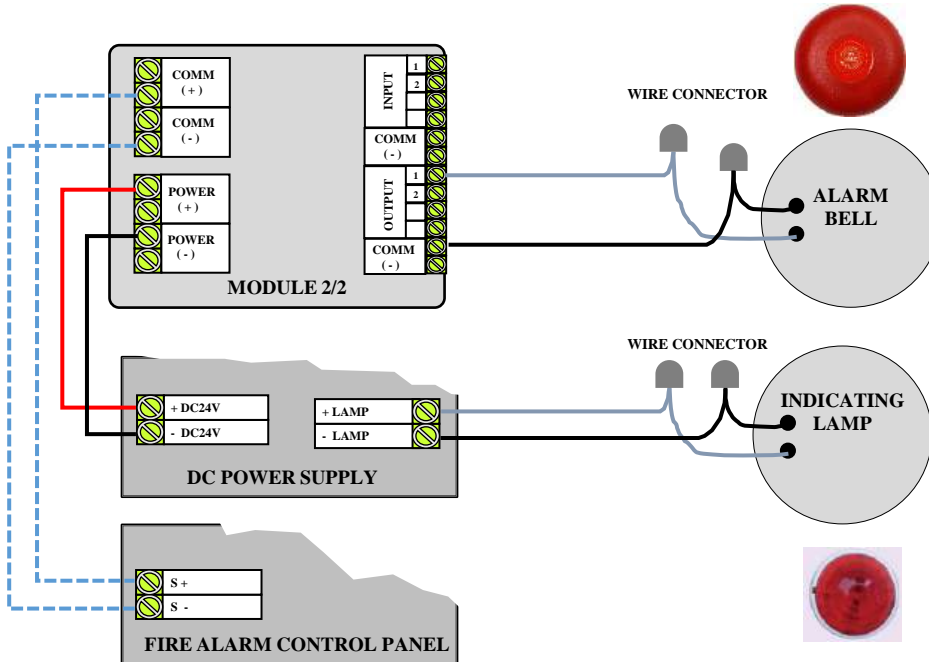
QUADRANGLE TYPE MANUAL CALL POINT



❖ SCHEMATIC DIAGRAM

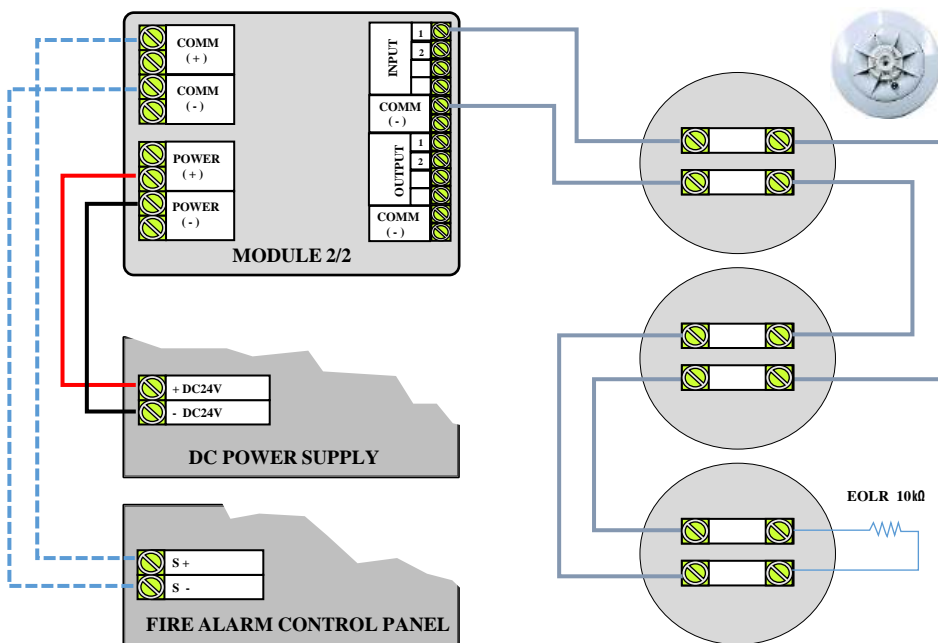
5 R – TYPE - BELL, LAMP, RISE OF RATE HEAT DETECTOR

ALARM BELL & INDICATING LAMP



RATE OF RISE HEAT DETECTOR

RATE OF RISE HEAT DETECTOR



❖ SCHEMATIC DIAGRAM

6 R – TYPE - NORMAL DETECTOR

FIXED TEMPERATURE HEAT DETECTOR

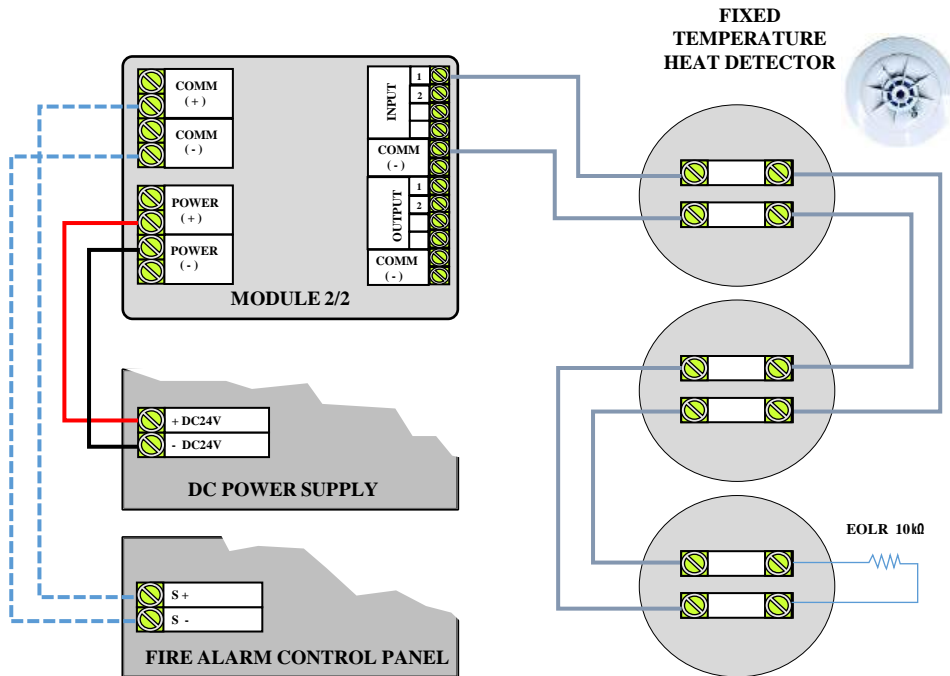
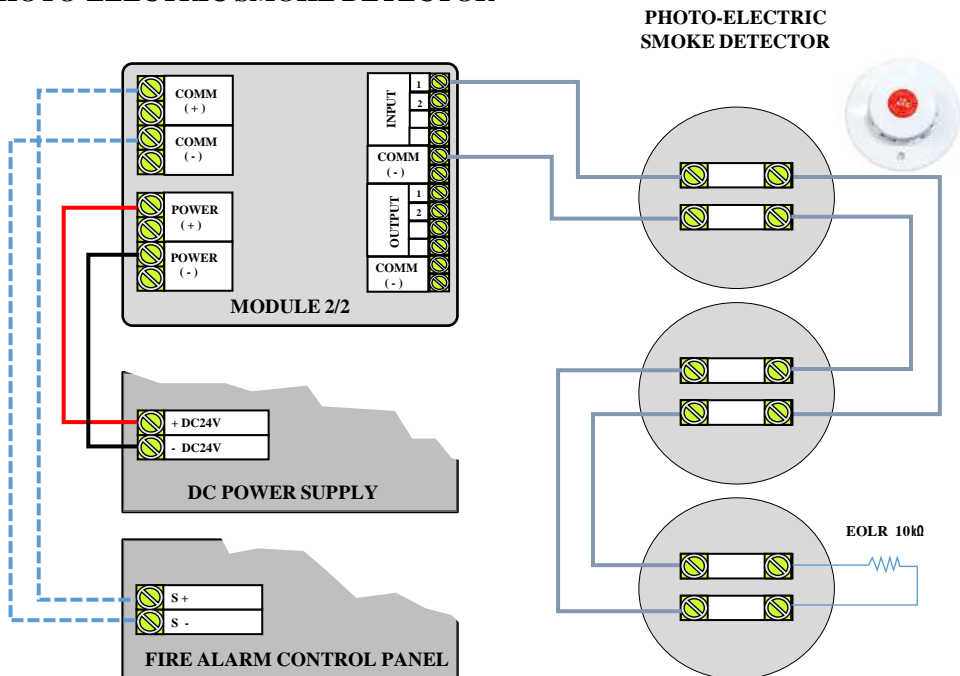


PHOTO-ELECTRIC SMOKE DETECTOR



❖ SCHEMATIC DIAGRAM

7 R – TYPE - ANALOG DETECTOR

ANALOG TYPE HEAT DETECTOR

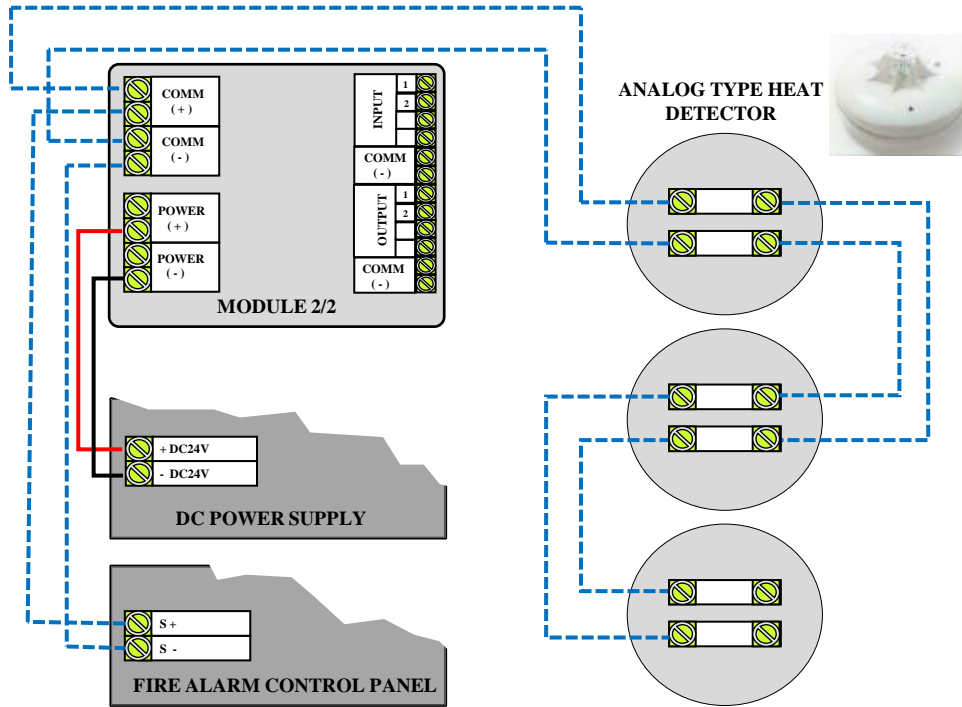
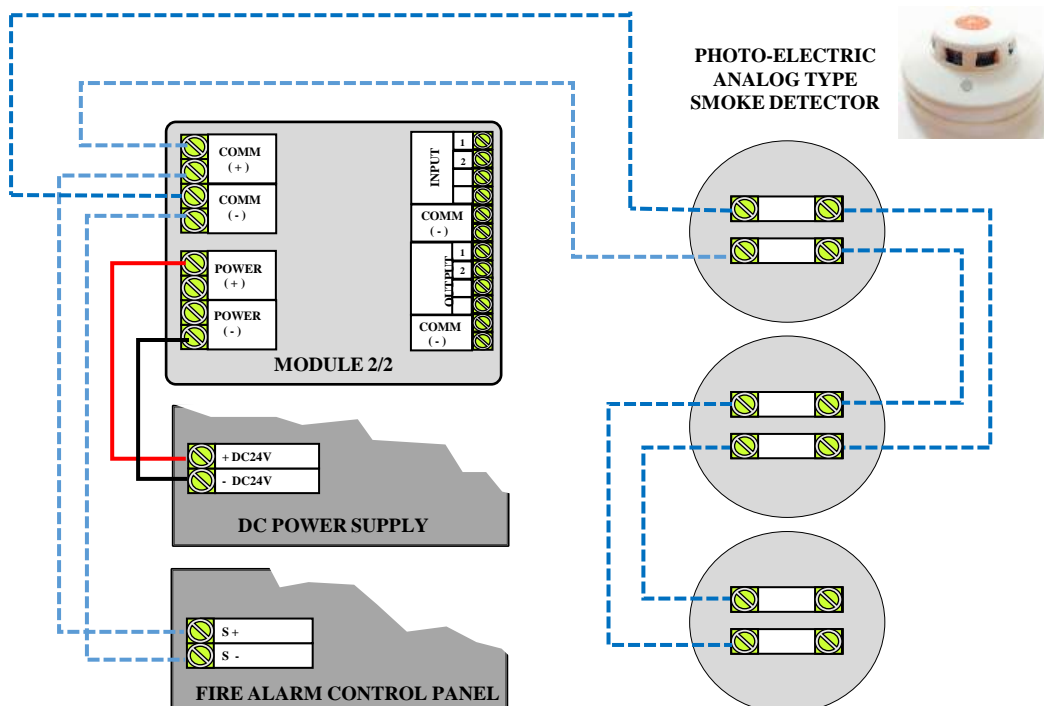
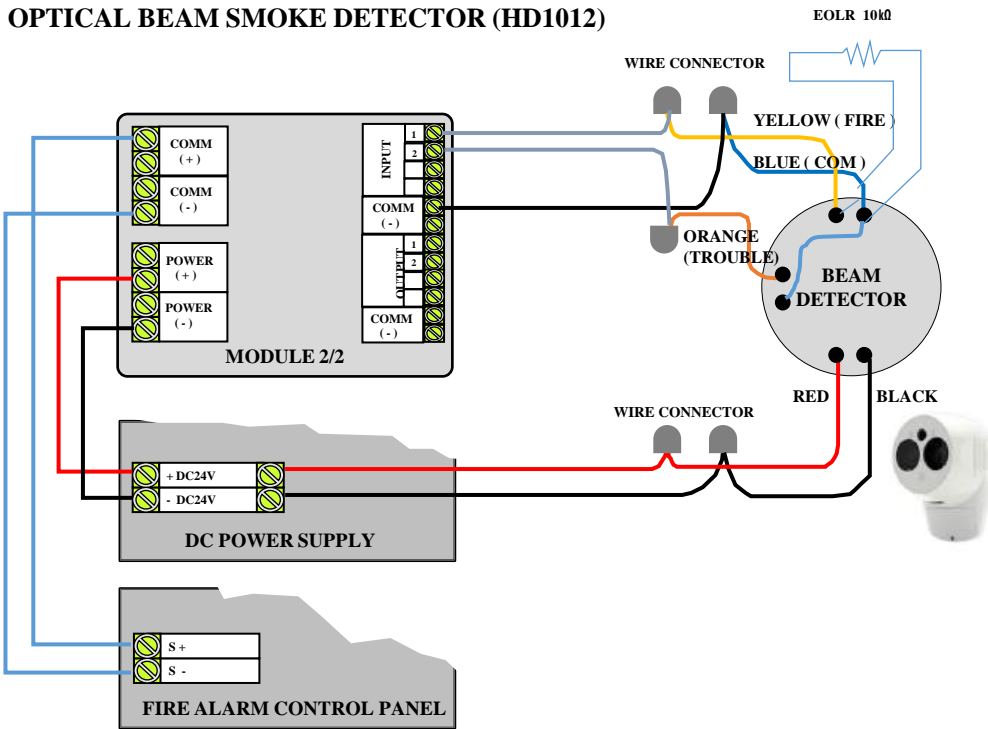


PHOTO-ELECTRIC ANALOG TYPE SMOKE DETECTOR

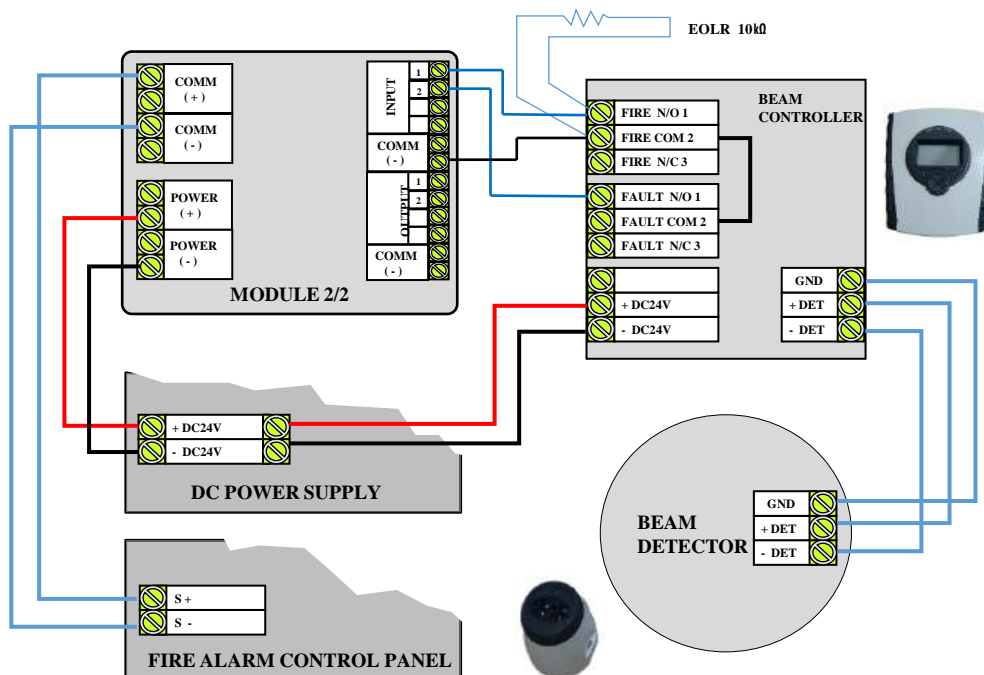


❖ SCHEMATIC DIAGRAM

8 R – TYPE - BEAM DETECTOR



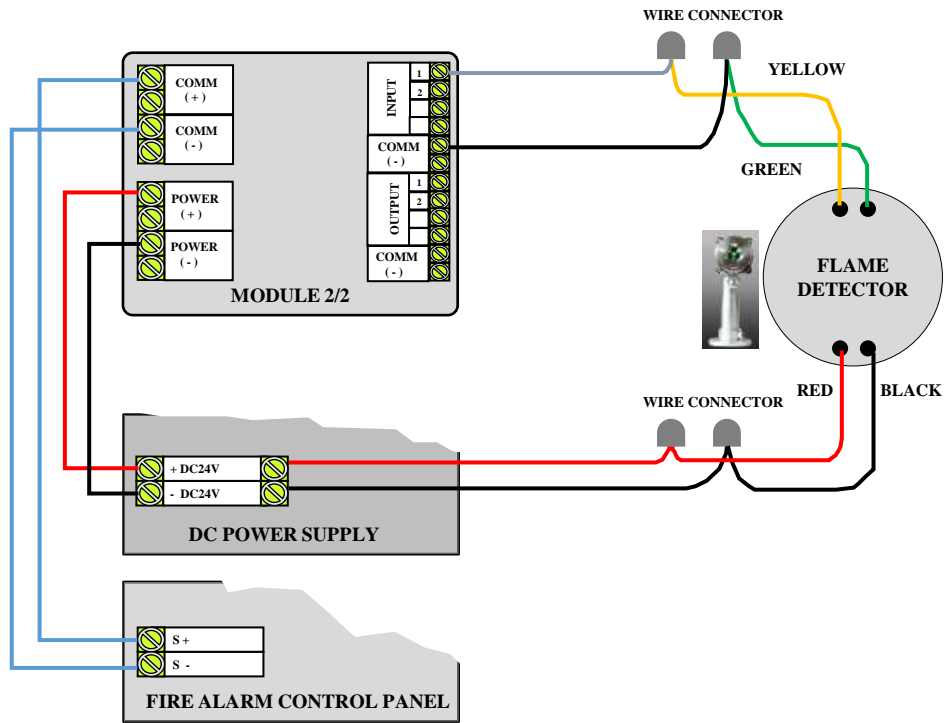
ANALOG TYPE OPTICAL BEAM SMOKE DETECTOR (HD1016)



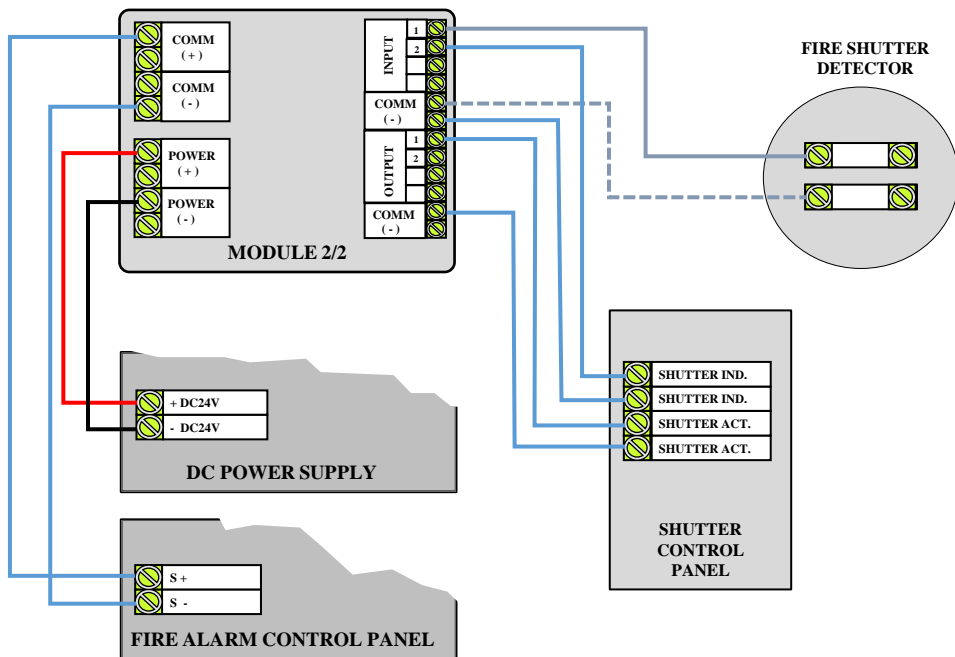
❖ SCHEMATIC DIAGRAM

9 R – TYPE - FLAME DETECTOR

FLAME DETECTOR



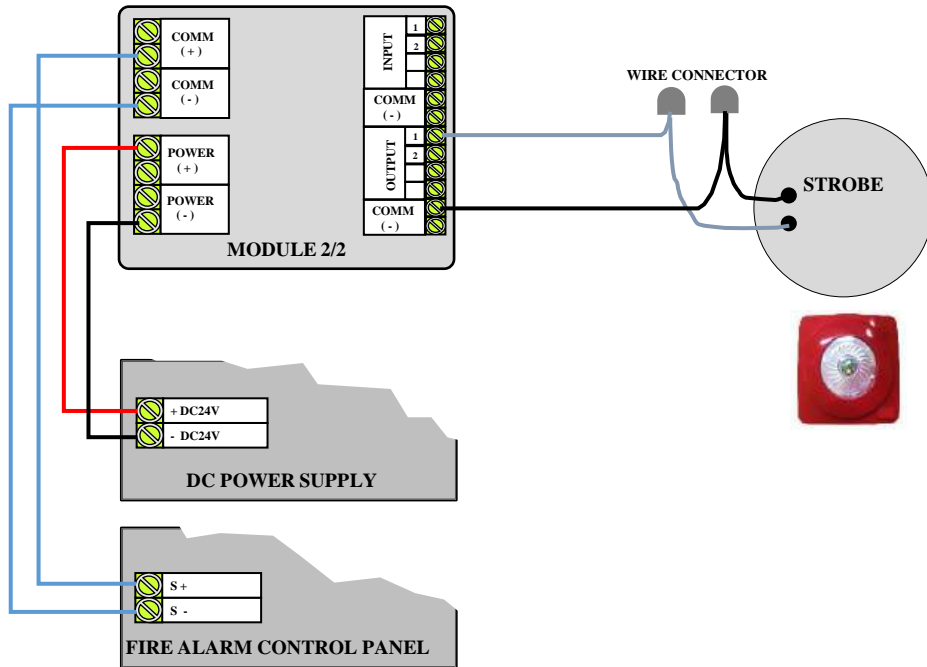
FIRE SHUTTER (The wiring also changes depending on the shutter manufacturer.)



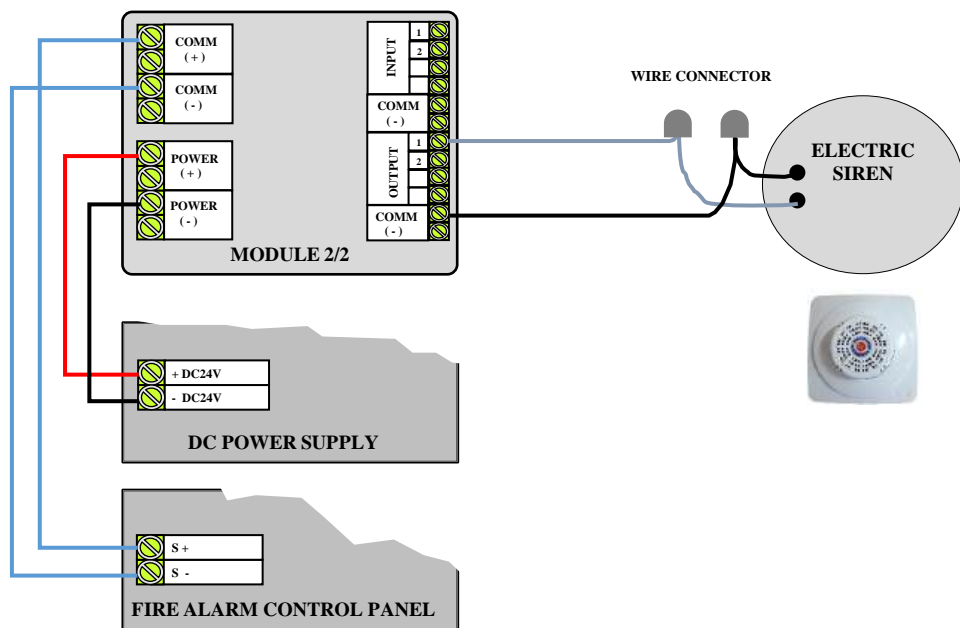
❖ SCHEMATIC DIAGRAM

10 R – TYPE - STROBE, SIREN

STROBE



ELECTRIC SIREN

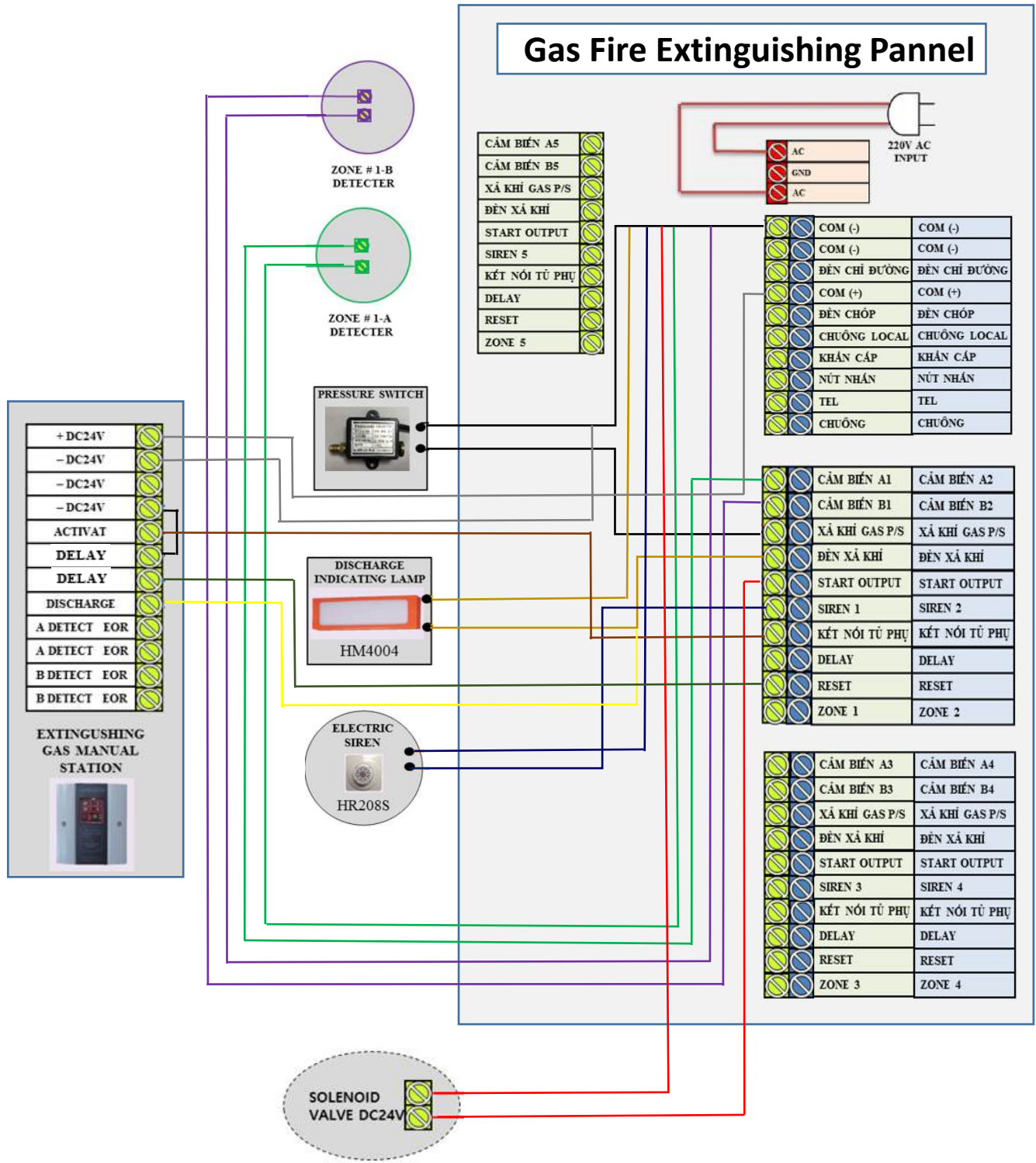


❖ SCHEMATIC DIAGRAM

11 R – TYPE - EXTINGUISHING GAS CONTROL PANEL

EXTINGUISHING GAS CONTROL PANEL

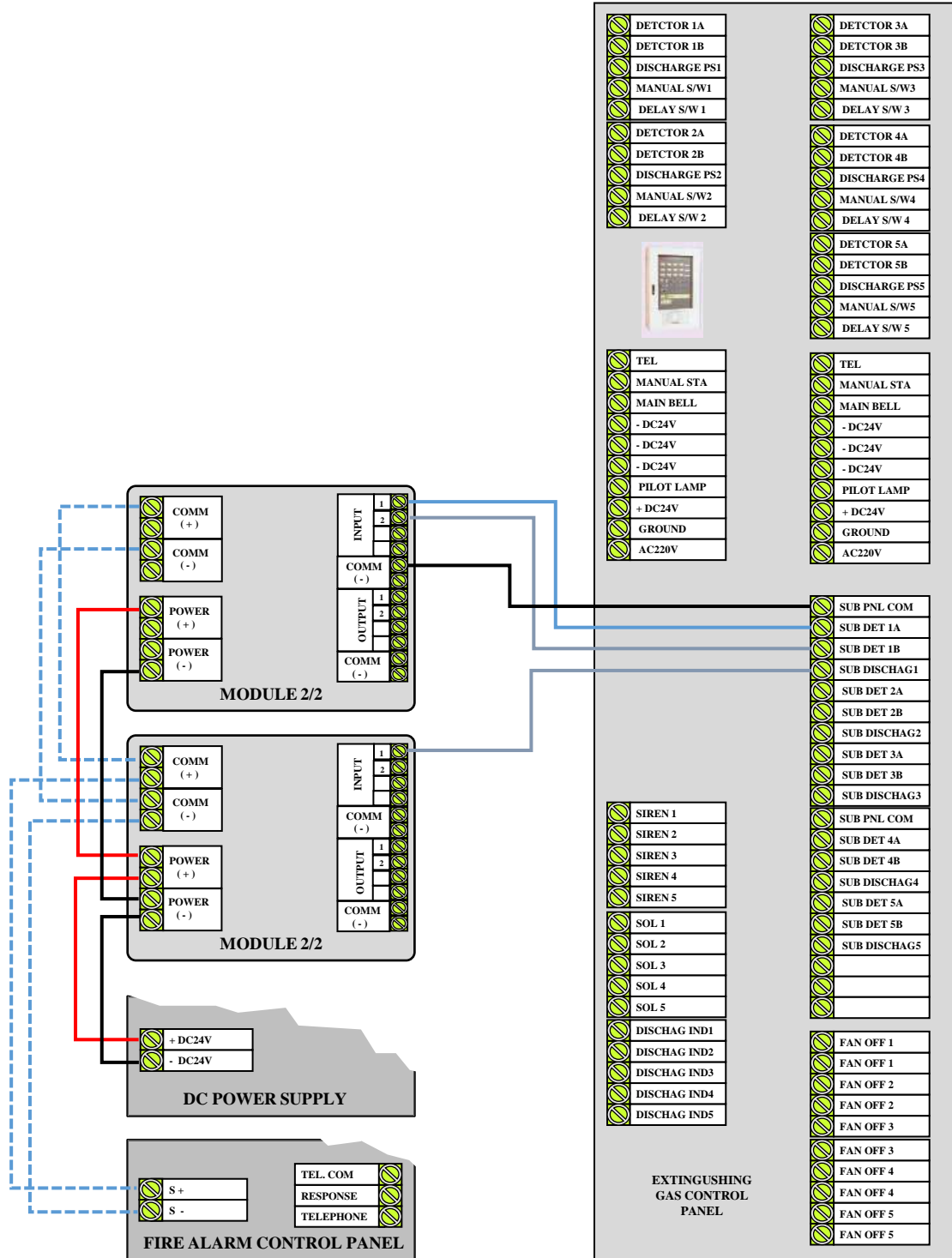
(The wiring is also changed according to the customized fire panel.)



❖ SCHEMATIC DIAGRAM

12 R – TYPE - EXTINGUISHING GAS SIGNAL REMOTE INDICATING CONNECTION

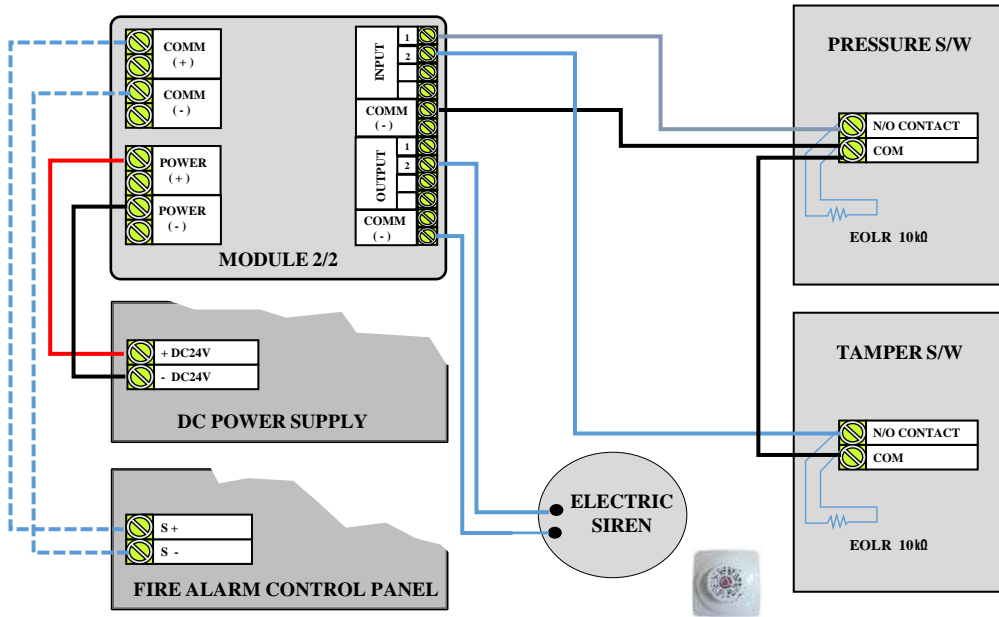
EXTINGUISHING GAS SIGNAL REMOTE INDICATING CONNECTION
(The wiring is also changed according to the customized fire panel.)



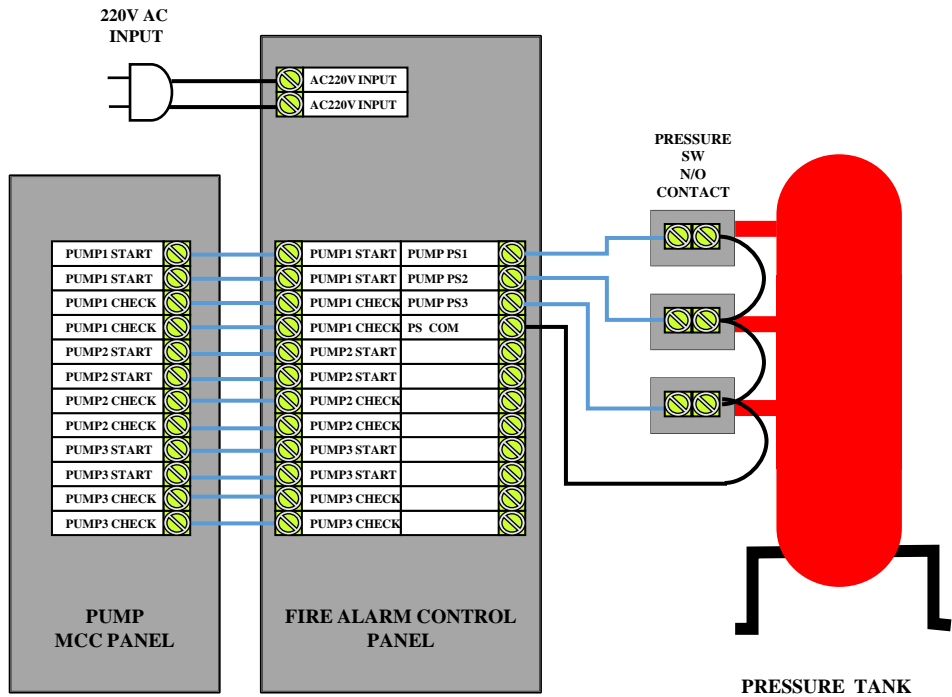
❖ SCHEMATIC DIAGRAM

13 R – TYPE - PUMP, SPRINKLER

SPRINKLER ALARM VALVE



PUMP MCC & PRESSURE TANK

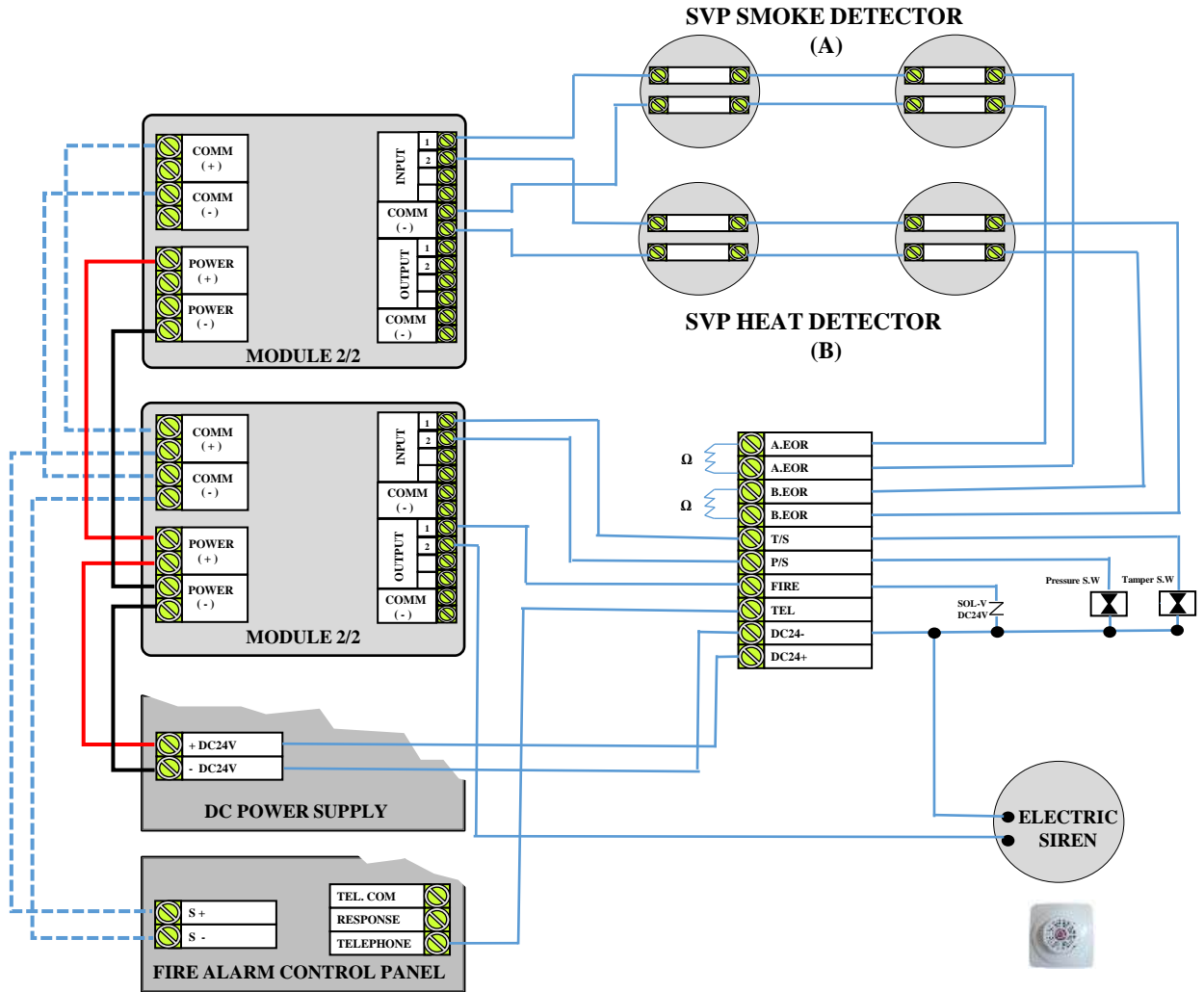


❖ SCHEMATIC DIAGRAM

14 R – TYPE - SPRINKLER PREACTION VALVE (SVP) CONTROL

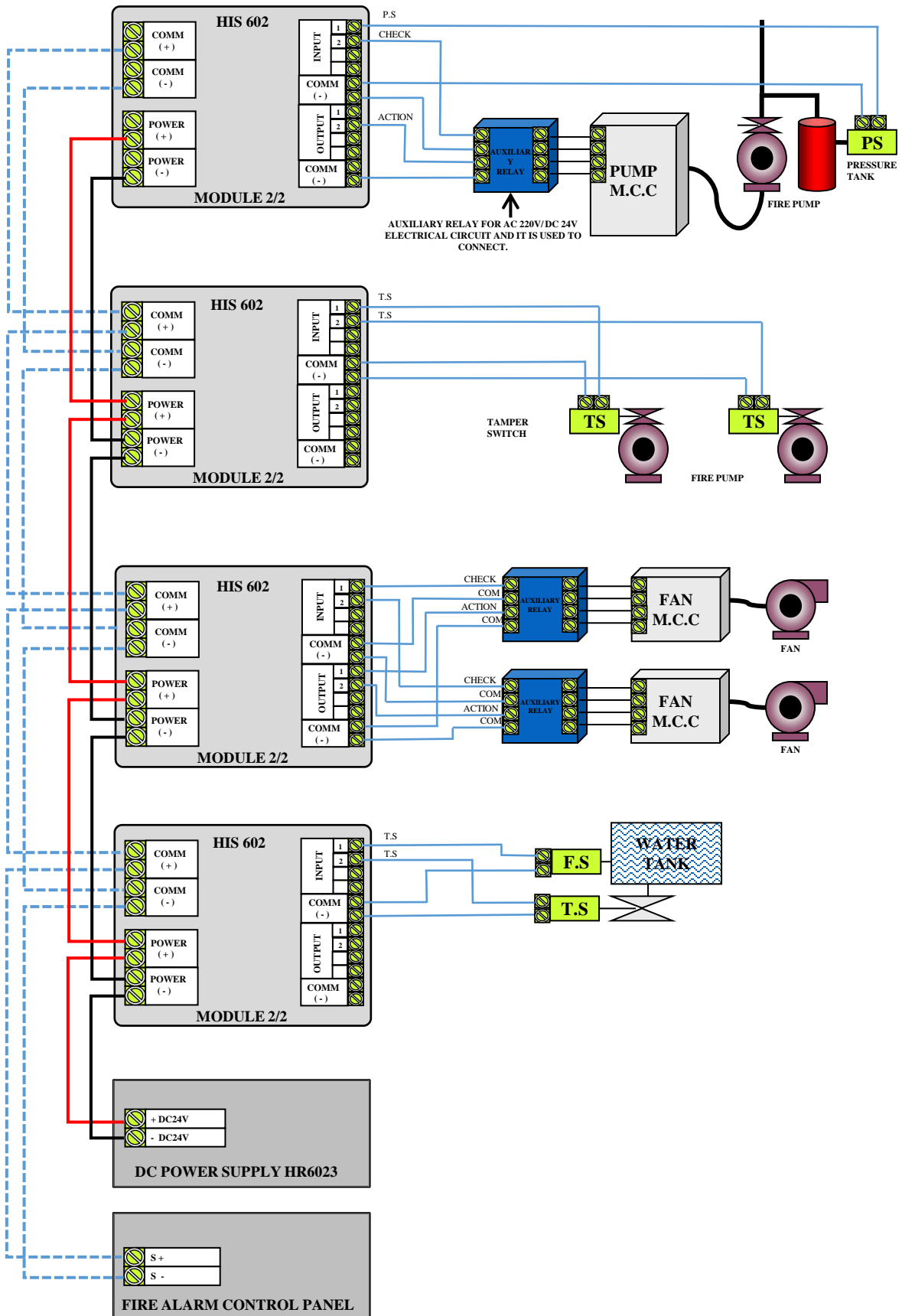
SPRINKLER PREACTION VALVE (SVP) CONTROL.

(The wiring is also changed according to the customized fire panel.)



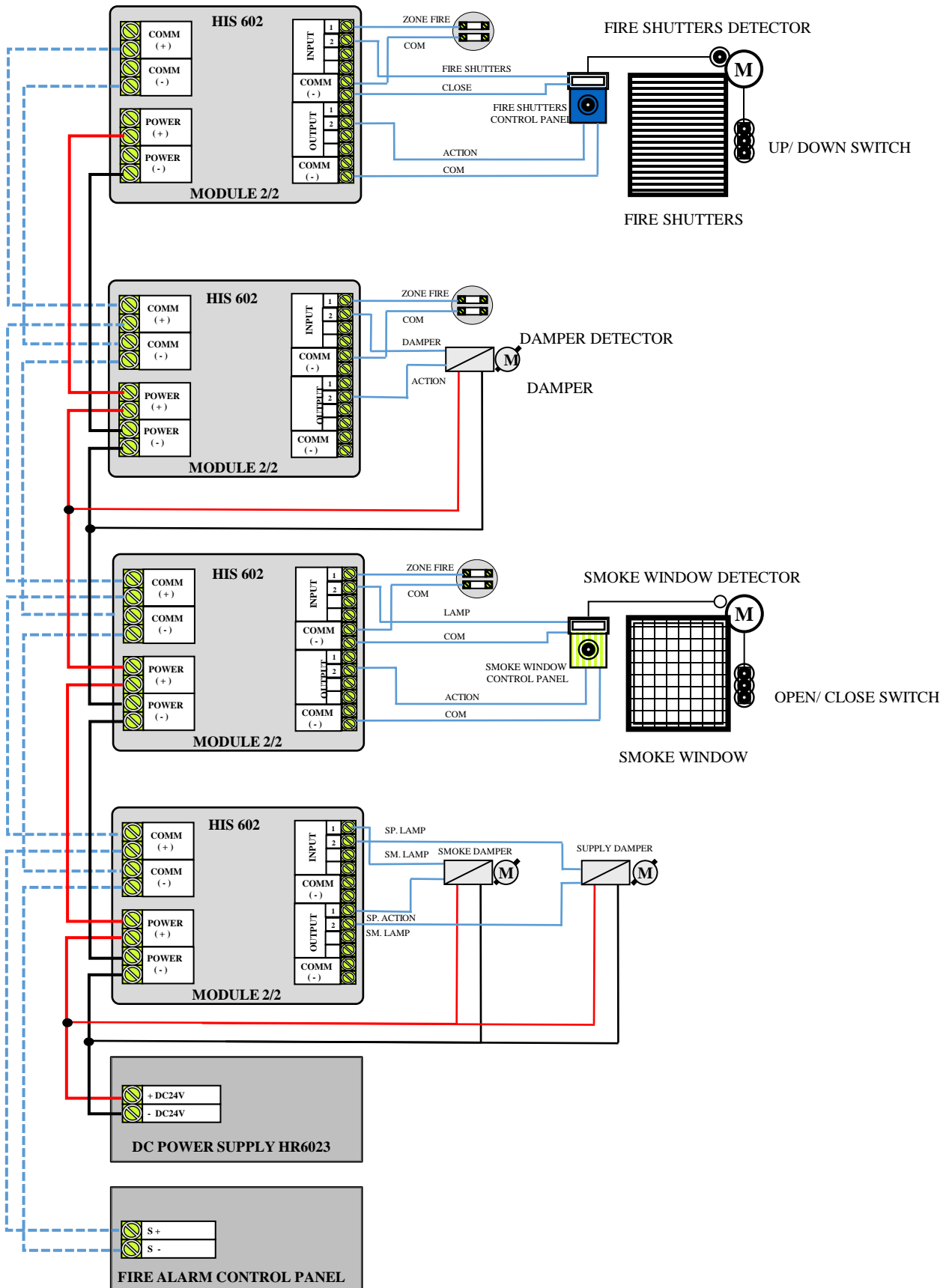
❖ SCHEMATIC DIAGRAM

15 R – TYPE - PUMP, FAN, WATER TANK SYSTEM



❖ SCHEMATIC DIAGRAM

16 R – TYPE - SMOKE WINDOW DETECTOR & FIRE SHUTTERS DETECTOR



❖ SCHEMATIC DIAGRAM

18 EXPLANATION OF TERMINOLOGIES FIRE-RELATED

TERM	EXPLANATION
Conventional Fire Alarm System	Is the automatic fire alarm system with fire alarm function to an area, a place (there may be one or more fire detectors).
Addressable Fire Alarm System	Is an automatic fire alarm system capable of accurately detecting to each location of each separate detector (each specific address).
Fire Alarm Control Panel	A device that provides power, receives and processes signals according to the set functions.
Detector	An automatic device sensitive to the phenomena associated with fire (temperature rise, smoke and light emitting), capable of generating appropriate signals and transmitting signals to the fire alarm center.
Fire Alarm Manual Call Point	A device to help people proactively operate a manual fire alarm when a person directly detects a fire when automatic fire alarm devices have not worked yet or in an area where there is no detector.
Addressable Fire Alarm Control Panel	In addition to the usual functions, the address fire alarm panel also supports information display on the screen, connects to the network, checks system parameters, activates or quarantines addresses when necessary, connect to computers to monitor the system, connect many peripherals.
Addressable Detector	In addition to normal functions, the addressable detector allows changing the working threshold at the request of the designer or installer.
Module	As a device to create addresses for conventional detectors or push buttons when the above devices want to connect to the fire alarm control panel.
Loop	Signal wire in the addressable fire alarm system is run from the first detector to the last detector and runs to the center to form a signal circuit (loop).
Addressable	Because all the main equipment of the system is connected to the main signal line, to distinguish between different devices, each main device must have a unique identifier on the entire fire alarm system. address. This identifier is called the address of the device.
Signal control peripheral device	Peripheral device is an external device of the automatic fire alarm system, controlled by fire alarm control panel. For example, elevator system, fire screen, pressure fan system for lift chamber, automatic fire fighting system.

17 COMPARISON COMMUNICATION METHOD

SPECIFICATION	RS232C	RS422	RS485
Operation Model	Single-ended	Differential	Differential
Maximum Number Of Driver/ Receiver	1 Driver	1 Driver	32 Driver
	1 Receiver	32 Receivers	32 Receivers
Maximum Coverage	About 15m	About 1.2km	About 1.2km
Maximum Communication Speed	20Kb/s	10Mb/s	10Mb/s
Support Transmission System	Full Duplex	Full Duplex	Half Duplex
Number Of Communication Lines	9	4	2
Features	Low-speed communication System A signal transmission distance is Short. Used to communicate between devices inside the emergency room	High speed communication System. Long distance signal transmission TX and RX lines are separated	High-communication system Long distance signal transmission RX and TX lines to public use

❖ CONTROL PANELS



❖ SECUTECH EXHIBITION



❖ INSTALLATION, MAINTENANCE OF FIRE PROTECTION SYSTEM



❖ FIRE PROTECTION EQUIPMENT QUALITY CHECKER



PHOTO ELECTRIC SMOKE DETECTOR TEST MACHINE



FIXED HEAT DETECTOR TEST MACHINE



INCREASED HEAT DETECTOR TEST MACHINE



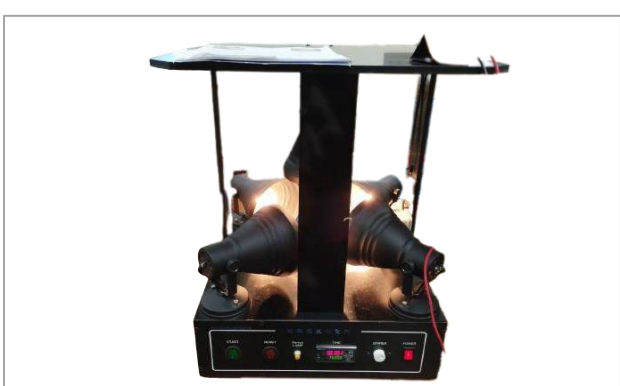
BELL FIRE ALARM TEST MACHINE



PUSH BUTTON TESTER



MACHINE TO TEST THE RELIABILITY OF THE FIRE ALARM BUTTON



ILLUMINATION TEST MACHINE



VIBRATION TESTING MACHINE

❖ FIRE PROTECTION EQUIPMENT QUALITY CHECKER



INJECTOR LEAK PRESSURE TEST MACHINE



INJECTOR HEAD FORCE TESTING MACHINE



MACHINE TO CHECK SPRAY HEAD OPERATION



IMPACT FORCE TESTING MACHINE



HIGH TEMPERATURE ELECTRIC FURNACE



CHECKER FOR ENVIRONMENTAL CORROSION OF EQUIPMENT



ELECTRONIC FIRE ALARM TESTING EQUIPMENT



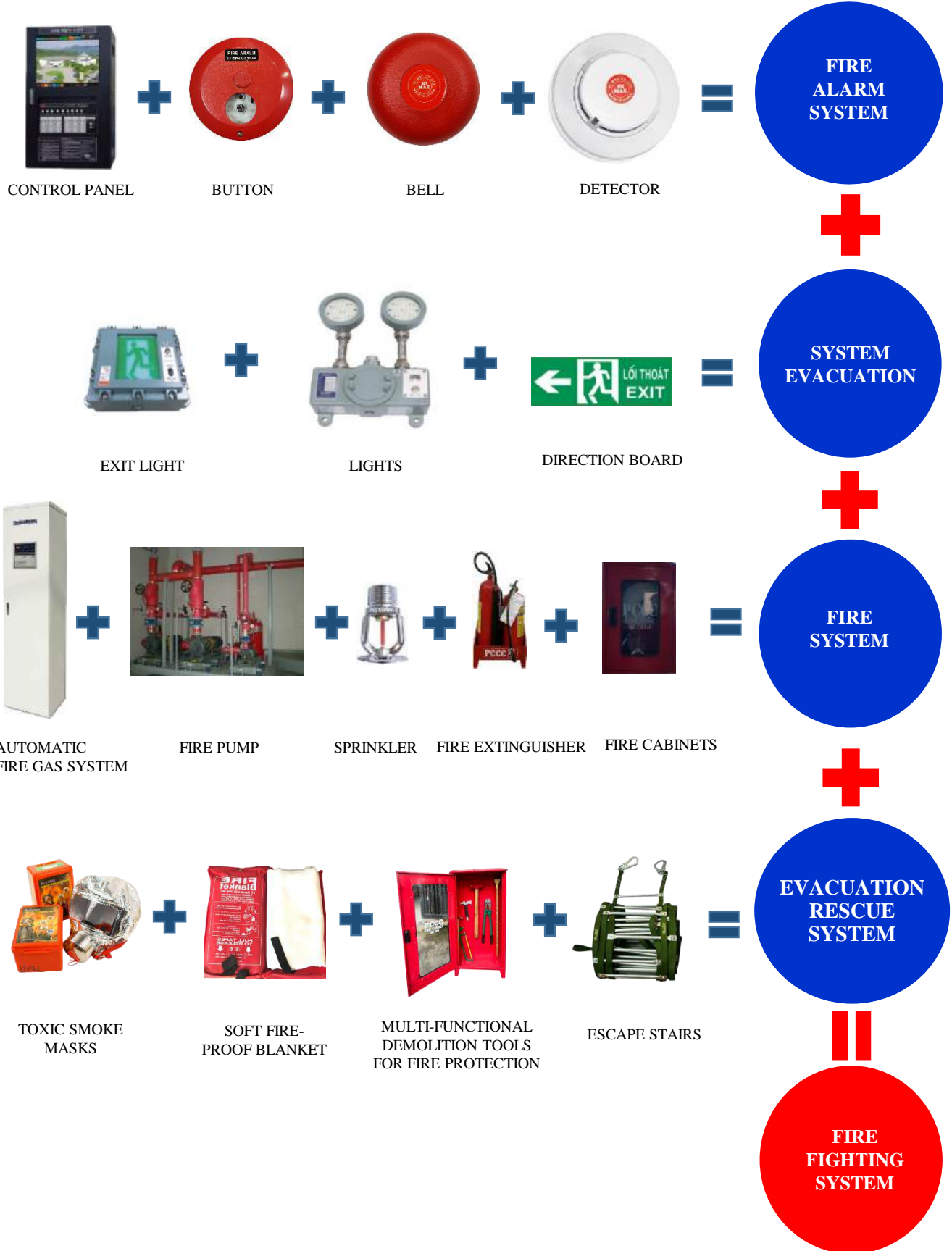
ELECTRONIC FIRE ALARM TESTING EQUIPMENT

❖ HI-MAX VIETNAM



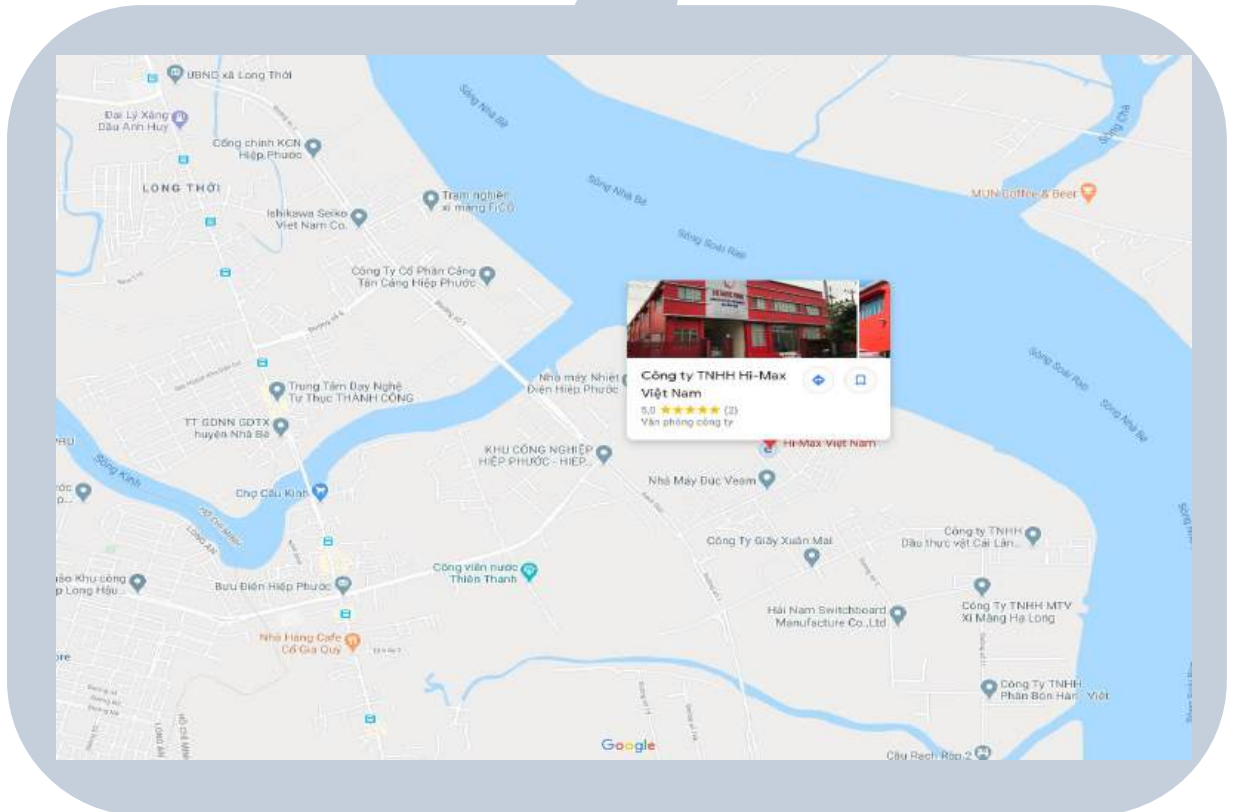
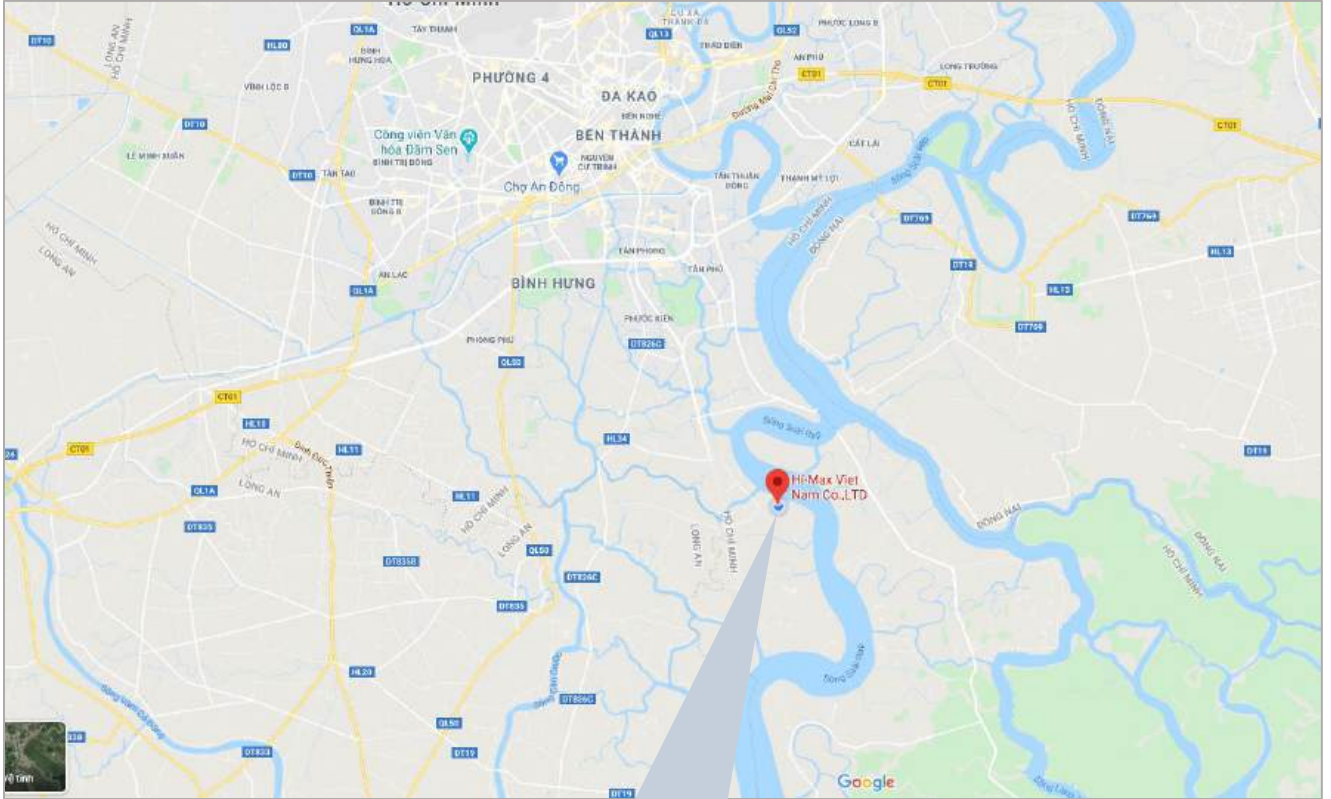
❖ SUMMARY OF FIRE PROTECTION SYSTEM

❖ THIS CONTENT WILL HELP THE INVESTOR KNOW MORE ABOUT THE FIRE PREVENTION SYSTEM



MAP

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