AUTOMATIC FIRE EXTINGUISHING SYSTEM
CABINET TYPE

(OPERATING MANUAL)

HI-MAX CO., LTD

CONTENTS

GENERAL SPECIFICATIONS

1. NAME OF ARTICLE : PACKAGE TYPE OF AUTOMATIC FIRE EXTINGUISHING SYSTEM

2. FORM NO. : CABINET 07-1,2 (HCFC BLEND A 50kg,100kg)
CABINET 07-3,4 (HALON1301 50kg,100kg)
CABINET 07-5,6,7,8 (HFC-227ea50kg,75kg,100kg,150kg)
CABINET 07-12,13 (HFC-23 50kg,100kg)
CABINET 07-14,15 (CO2 45kg,90kg)

3. MEASURE : 1B/T - 450(W) * 1900(H) * 430(D)
2B/T - 620(W) * 1900(H) * 430(D)

4. COLOR : LIGHT YELLOW (HK 427K)

5. MAIN POWER: AC 110/220V 50Hz

6. D.C. POWER : Ni-Cd Battery DC 24V, 1300mA

7. TEMPERATURE : 0℃ ~ 40℃

8. ALARM : SIREN AND VOICE MESSAGE (SPEAKER INSTALLED)

9. FIRE EXTINGUISHING GAS :

10. SOLENOID : DC 24V 1.5A

11. PRESSURE SWITCH : DC24V 5A, WORKING PRESSURE-2kg/㎠

12. FLEXIBLE : DISCHARGING FOR 10 SECONDS

13. DISCHARGING HEAD : DISCHARGING FOR 10 SECONDS

14. EXTERIOR: OPERATING MANUAL BOX
INDICATING LAMP FOR DISCHARGE

FEATURES

1. POWER SOURCE PART

   A. INPUT MAIN POWER: AC 220V, AUX. POWER: DC 24V

   B. D.C. BATTERY: Ni-Cd BATTERY WHICH IS INSTALLED THE PROTECTIVE CIRCUIT TO PREVENT THE BATTERY FROM OVERCHARGE.

   C. DURING INTERRUPTION OF ELECTRIC POWER, THE POWER IS REPLACED TO D.C. POWER AUTOMATICALLY. AND WHEN RETURNING TO NORMAL, THE POWER IS CHANGED TO THE MAIN POWER SOURCE AUTOMATICALLY.

   D. THE FUSES FOR AC,DC, BATTERY SHOULD BE USED SEPARATELY TO PROTECT THE INSTALLED CIRCUITS FOR THE DEMAGE.

2. DETECTOR PART

   A. BASICALLY FUNCTION TO GIVE A ALARM BY RECEIVING THE DETECTOR OPERATING SIGNAL

   B. ON FIRE, IT HAS A RELATING FUNCTION TO NOTICE TO GENERAL PROTECTION TEAM.

   C. EVEN ONE OF DETECTOR A OR B IS OPERATED WRONGLY, THERE IS A PREVENT FUNCTION, WHICH HAS THE SEPARATED LINES (2 SEPARATED LINES),NOT TO DISCHARGE FIRE EXTINGUISHING GAS BY WRONG OPERATING.

3. MANUAL OPERATING PART

   THE OPERATING SWITCH CAN BE MADE DOUBLY TO PROTECT FROM THE WRONG OPERATING .

4. INDICATING LAMP PART

   A. THE INDICATING LAMP, LED, IS PLACED AT THE FRONT PANEL.

   B. THE INDICATING LAMPS ARE CONSIST OF AS FOLLOWS.

      - VOLTAGE INDICATING
      - FIRE LAMP
      - DISCHARGE LAMP
      - MANUAL OPERATING LAMP
      - BATTERY TROUBLE LAMP
      - A.C. LAMP
      - D.C. LAMP
      - DETECTOR LAMP
      - DETECTOR TROUBLE LAMP

5. OPERATING SWITCH PART

   A. THE OPERATING SWITCH IS PLACED AT THE FRONT PANEL.

   B. THE OPERATING SWITCH CAN BE CONSISTED BY PUSH BUTTON TYPE OR SELECTING BUTTON TYPE. FOR SUSPENDED SWITCH, IT IS SHOWN AS NOTICE (ON AND OFF INDICATING).

   C. THE SWITCHES FOR A.C. AND D.C. POWER IS ATTACHED INSIDE NOT TO HANDLE BY ANYONE.

D. THR OPERATING SWITCHES ARE CONSIST OF AS FOLLOWS.

- CLOCK/TIMER
- RESET
- BATTERY TEST
- AUTO/ MANUAL
- VALVE STOP
- ALARM STOP
- LINE TROUBLE TEST
- WORKING TEST
- AUTO-RESET
- CIRCUIT TEST
- MANUAL OPERATING

6. CONSTITUTION OF DETECTOR LINE

A. COMPATIBLE OPERATING: AUTO OPERATING BY DETECTOR AND MANUAL OPERATING WITH MANUAL OPERATING SWITCH.
IN CASE OF MANUAL OPERATING, FOR ANY POSITION OF SELECTING SWITCH FOR AUTO OR MANUAL, IT IS SETUP TO BE OPERATED WITH MANUAL OPERATING.

B. THE TIMER CAN BE SET TILL 30 SECONDS MAX.
NORMAL: CLOCK FUNCTION (CURRENT TIME)
FIRE: COUNTER FUNCTION
DISCHARGING: STOP CLOCK FUNCTION TO KNOW THE DISCHARGING TIME.

C. ALL THE CABLE CONNECTING IS MADE BY USING CONNECTOR.

D. EACH RELAY LINE HAS A POSSIBLE SELF-CONTROL FUNCTION.

E. RESISTANCE OF EDGE PART FOR EACH LINE IS USED WITH 10kΩ.

F. EACH TERMINAL IS USED WITH OVER 20A.

G. THE LINKED TERMINAL OF OTHER FACILITIES CAN BE CHANGEABLE BETWEEN A AND B CONTACT POINT.

H. THE GENERAL CENTER CAN CONTROL THE SYSTEM BY GETTING THE SIGNAL FROM DETECTOR A & B (A CONTACT POINT WITH NO VOLTAGE)

I. FIRE EXTINGUISHING GAS IS DISCHARGED WITHIN 10 SECONDS.

J. THE PRODUCTED IS PASSED ALL THE TESTED BY KOREAN FIRE-FIGHTING ASSOCIATION.

NAME AND FUNCTION OF OPERATING PANEL

1. CLOCK/ TIMER
   NORMAL: CLOCK FUNCTION
   DURING OPERATING DETECTOR A & B OR MANUAL WORKING: COUNTER FUNCTION
   DURING DISCHARGING: INDICATING OF DISCHARGING TIME

2. SWITCH FOR CLOCK CONTROL
   MODE: BY PUSHING THIS BUTTON, THE SETTING TIME IS INDICATED.
   FAST: TO ADJUST TIME FAST
   SLOW: TO ADJUST TIME SLOWLY

3. VOLTAGE INDICATING
   A POWER SOURCE OF INTERNAL LINE IS INDICATED AS FOLLOWS.

   OVER 26V
   NORMAL 24 V
   BELOW 22 V

4. FIRE LAMP
   DURING DETECTOR OPERATING OR MANUAL OPERATING, IT IS TURNED ON A LIGHT.

5. DISCHARGING LAMP
   DURING DISCHARGING, IT IS TURNED ON A LIGHT BY SIGNAL OF PRESSURE SWITCH .

6. MANUAL OPERATING LAMP
   BY PRESSING THE SWITCH FOR MANUAL OPERATING OR THE OPERATING SWITCH IN MANUAL BOX OUTSIDE, IT IS TURNED ON A LIGHT.

7. BATTERY TROUBLE LAMP
   IT IS TURNED ON A LIGHT IF BATTERY DISCONNECTED OR UN-CHARGED OR INFERIOR

8. A.C. POWER LAMP
   IT IS TURNED ON A LIGHT WHEN THE POWER SOURCE IS USED AS AC.

9. D.C. POWER LAMP
   IT IS TURNED ON A LIGHT WHEN THE POWER SOURCE IS REPLACED AS D.C. POWER DUE TO CUTTING OF AC

10. DETECTOR LAMP

IT IS TURNED ON A LIGHT DURING DETECTOR OPERATING

11. DETECTOR TROUBLE LAMP

IT IS TURNED ON A LIGHT WHEN PRESSING THE BUTTON FOR SIGNAL TESTING OR A DETECTOR LINE IS DISCONNECTED OR A EDGE RESISTANCE IS NOT ATTACHED.

12. RESET BUTTON

THE SYSTEM IS RESET AS INITIAL STATUS IF YOU PRESS THE BUTTON FOR DETECTOR SIGNAL LINE AND MANUAL OPERATING SIGNAL.

WHEN A DETECTOR LINE IS OPERATING CONTINUITY, IT IS NOT RESET.

13. BATTERY TESTING BUTTON

USE TO TEST A BATTERY WHETHER IT IS NORMAL OR NOT.

IF NORMAL, INDICATING LAMP FOR NORMAL 24 V IS TURNED ON A LIGHT.

IF ABNORMAL, INDICATING LAMP FOR BELOW 22 V IS TURNED ON A LIGHT.

14. AUTO BUTTON

AUTOMATICALLY, CO2 GAS IS DISCHARGED BY SOLENOID OPERATING ACCORDING TO ALL DETECTOR, A & B OPERATING OR MANUAL OPERATING.

15. MANUAL BUTTON

* EVEN BOTH DETECTOR A & B IS OPERATING, THE ALARM SIREN BLOWS ONLY.

* GAS DISCHARGED BY SOLENOID OPERATING ACCORDING TO ONLY MANUAL WORKING.

16. VALVE STOP

WHEN SELECTING THE VALVE STOP SWITCH, SOLENOID VALVE IS NOT OPERATED.

17. ALARM STOP

WHEN SELECTING THE ALARM STOP BUTTON, AN SIREN ALARM IS NOT SERVED.

18. LINE TROUBLE TESTING

WHEN PRESSING THE BUTTON, IT IS TURNED ON A LIGHT IF DETECTOR IS ON DISCONNECTING

(WHEN THE EDGE RESISTANCE IS NOT CONNECTED.)

19. WORKING TEST

AFTER PRESSING THE BUTTON FOR WORKING TEST AND THEN SIGNAL TESTING BUTTON, YOU CAN DO SAME TEST LIKE DETECTOR OPERATING..

20. AUTO RESET

DURING WORKING TEST AFTER PRESSING AUTO RESET BUTTON, IN CASE OF ONLY PRESSING DETECTOR SIGNAL TESTING BUTTON, EACH LINE CAN BE TESTED.

21. CIRCUIT TESTING BUTTON

DURING SIGNAL TESTING, IT CAN BE USED TO SELECT DETECTOR SIGNAL A OR B

22. MANUAL OPERATING SWITCH

DURING FIRE, IF YOU OPEN THE PROTECTIVE COVER ON THE PANEL AND PRESS THE BUTTON FOR MANUAL OPERATING, FIRE EXTINGUISHING GAS IS DISCHARGED BY SOLENOID OPERATING.

23. SPEAKER : SIREN AND VOICE MESSAGE

INSTALLATION METHOD AND ORDER

1. INSTALLATION PLACE

   THE SYSTEM IS INSTALLED AT FLAT FLOOR AND SHOULD BE FIXED TO FLOOR.

2. POWER AND CONNECTION WITH EXTERIOR EQUIPMENTS

   A. SHOULD BE CHECK THE INPUT MAIN POWER AS 220 V. IF USING AS AC 110V, USE AFTER CHANGING THE CONVERTING SWITCH INSIDE TO AC 110V.

   B. IN CASE OF EXTERIOR CONNECTING, THE NOMINATED WIRE CAN BE RECOMMEND TO USE

3. GAS CYLINDER INSTALLATION

   DUE TO HIGH PRESSURE, FIRE EXTINGUISHING GAS CYLINDER CAN BE ATTACHED STRONGLY WITHOUT MOVING.

4. FLEXIBLE CONNECTION

   IT SHOULD BE FIXED TIGHTLY TO BE AIRTIGHT AND NOT TO LEAK GAS OUT.

5. NEEDLE VALVE CONNECTION

   THE NEEDLE VALVE SHOULD BE USED WITH 2B/T TYPE.

   AFTER IT IS CONNECTED TO F TYPE VALVE OF 2ND CYLINDER, ONE SIDE IS CONNECTED WITH COPPER PIPE DOWN FROM UPPER PART AND THE OTHER SIDE SHOULD BE CHOKED BY USING NUT

6. EQUIPMENTS TEST

   A. FIRST, TURN THE POWER ON AND CHECK THE STATUS OF LIGHTING FOR EACH LAMP, WORKING FOR EACH SWITCH AND DETECTOR AND RELATING TEST OF EQUIPMENTS OUTSIDE.

   B. AFTER TESTING, ALL THE OPERATING SWITCHES SHOULD BE REPLACED AS NORMAL.

7. SOLENOID CONNECTION

   AFTER INSERTING SAFE PIN INTO SOLENOID VALVE, IT IS CONNECTED INTO F TYPE VALVE OF CYLINDER

8. FINISH INSTALLATION

   AFTER CHECKING THE SWITCH AS NORMAL, IT IS FINISHED INSTALLING BY REMOVING THE SAFE PIN OF SOLENOID.

9. INSTALLATION METHOD

A. USE TO EXTINGUISH A FIRE AT A TIME IN THE WIDE RANGE BY CONNECTING SEVERAL FIRE EXTINGUISHERS WITH A ROW.

B. BY CONNECTING A DISCHARGING OF A MAIN SYSTEM WITH A ROW, 2ND AND 3RD SOLENOID ARE OPERATED AT THE SAME. OR

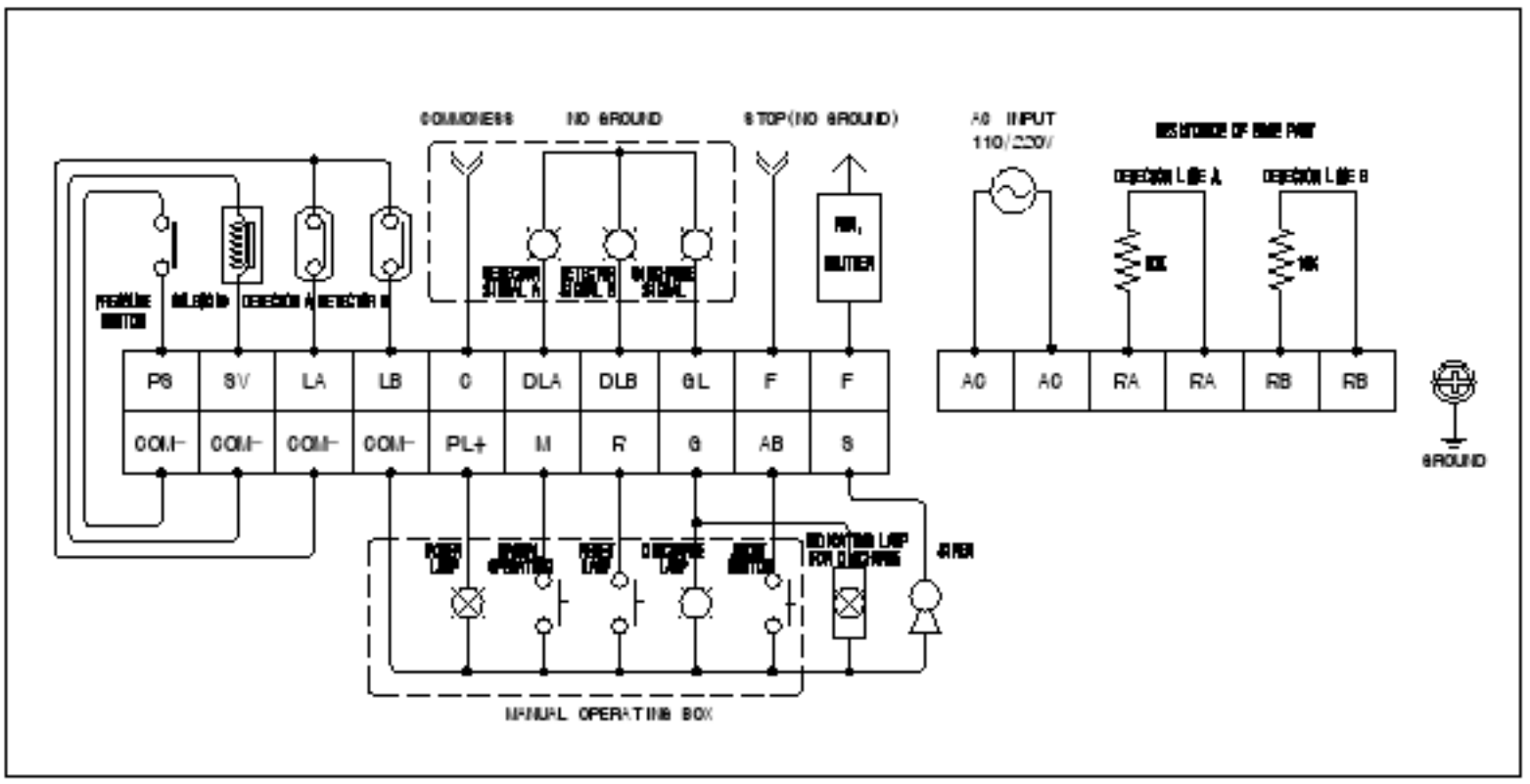
BY TRANSMITTING A DISCHARGING PRESSURE OF A MAIN SYSTEM TO 2ND AND 3RD EXTINGUISHER, IT IS OPERATED BY NEEDLE VALVE.

TERMINAL CONNECTION

1. TERMINAL NOTES

TERMINAL	DETAILS	REMARK
AC	INPUT POWER	AC220V 50 HZ
RA	DETECTOR A EDGE RESISTANCE	1/4W 10kΩ
RB	DETECTOR B EDGE RESISTANCE	"
COM-	COMMON -	
PL+	COMMON +	
AB	TIMER ABORT	MANUAL OPERATING BOX
R	RESET	MANUAL OPERATING BOX
M	MANUAL OPERATING	MANUAL OPERATING BOX
G	DISCHARGE	MANUAL OPERATING BOX, DISCHARGING LAMP
S	SIREN	EXTERIOR SIREN
PS	PRESSURE SWITCH	CONNECTED
SV	SOLENOID	
LA	DETECTOR A	
LB	DETECTOR B	
C	COMMON OF CONNECTING LINE	GENERAL CENTER, DEPART, REPARING SECTION
DLA	DETECTOR CONNECTION A	C AND A POINT WITH NO VOLTAGE
DLB	DETECTOR CONNECTION B	"
GL	DISCHARGE CONNECTION	"
F	EXTERIOR EQUIPMENT CONNECTION	NO VOLTAGE AND SEPARATED POINT

CONNECTION LINE



OPERATING MANUAL

1. AUTOMATIC OPERATING/POWER NORMAL:

   A. CAN BE SELECTED AS AUTO/MANUAL AUTOMATICALLY.

   B. DETECTOR A OR B OPERATING:

   - THE FIRE LAMP AND DETECTOR A OR B LAMP ARE TURNED ON A LIGHT. AND AT THE SAME TIME, GIVES A SIREN ALARM WITH ANNOUNCEMENT OF VOICE MESSAGE.
   - BY OPERATING THE PREVENTIVE EQUIPMENT FOR WRONG WORKING, THE SYSTEM IS RESET AUTOMATICALLY WITHIN 45 SECONDS WITHOUT OPERATING DETECTOR A & B AT A TIME.

C. BOTH DETECTOR A & B OPERATING:

   - THE FIRE LAMP AND DETECTOR A AND B LAMP ARE TURNED ON A LIGHT. AND AT THE SAME TIME, GIVES A SIREN ALARM WITH ANNOUNCEMENT OF VOICE MESSAGE CONTINUOUSLY.
   - AT THE SAME TIME, TIMER OPERATES BY COUNTING FROM 30 SECONDS TO 0 SECOND AND AFTER COUNTING, FIRE EXTINGUISHING GAS IS DISCHARGED BY SOLENOID VALVES OPERATING.
   - AT THIS TIME, DISCHARGING LAMP IS ON BY PRESSURE SWITCH OPERATING AND TIMER STOPS TO INDICATE THE DISCHARGED TIME..
   - THE RELATED EQUIPMENTS OUTSIDE (FAN, SHUTTER, DAMPER) ARE OPERATED.
   - ALL THE OPERATED STATUS IS TRANSMITTED TO THE GENERAL CENTER.

C. MANUAL OPERATING

   -IF PRESSING THE MANUAL OPERATING SWITCH, DETECTOR A & B IS THE SAME AS OPERATING.

2) MANUAL OPERATING

   A. SELECT AUTO OR MANUAL SWITCH BY MANUAL.

   B. BOTH DETECTOR A & B OPERATING:

   - THE FIRE LAMP AND DETECTOR A AND B LAMP ARE TURNED ON A LIGHT. AND AT THE SAME TIME, GIVES A SIREN ALARM WITH ANNOUNCEMENT OF VOICE MESSAGE ONLY. GAS IS NOT DISCHARGED DUE TO NOT OPERATING OF SOLENOID.

MANUAL OPERATING: (SEMI-AUTOMATIC) / POWER NORMAL.

- OPEN THE PROTECTIVE COVER ON THE PANEL AND PRESS THE BUTTON FOR MANUAL OPERATING, THE MANUAL OPERATING LAMP IS TURNED ON A LIGHT AND AT THE SAME TIME, GIVES A SIREN ALARM WITH ANNOUNCEMENT OF VOICE MESSAGE CONTINUOUSLY.
- AT THE SAME TIME, TIMER OPERATES AND AFTER COUNTING THE SET TIME, FIRE EXTINGUISHING GAS IS DISCHARGED BY SOLENOID VALVES OPERATING.
- DISCHARGING LAMP IS ON BY PRESSURE SWITCH OPERATING AND TIMER STOPS TO INDICATE THE DISCHARGED TIME.
- THE RELATED EQUIPMENTS OUTSIDE (FAN, SHUTTER, DAMPER) ARE OPERATED.
- ALL THE OPERATED STATUS IS TRANSMITTED TO THE GENERAL CENTER.

3) FULL MANUAL OPERATING : POWER FAILURE

- OPEN CABINET DOOR, REMOVE THE SAFETY CLIP OF SOLENOID VALVE AND HIT THE PUSH PART STRONGLY, GAS IS DISCHARGED.
- OPERATE AFTER CHECKING WHETHER THERE IS ANYBODY OR NOT AND A PATH OF RETREAT OF OPERATOR

OPERATING METHOD FOR FIRE FIGHTING SYSTEM

1. TIME SETTING

IN CASE OF CHANGING THE CURRENT TIME

EX) 00:00 → 12:55

SELECTING SWITCH	DISPLAY	DESCRIPTIONS
	00 : 00	INITIAL STAGE
F A S T	00 : 01 ↓ 12 : 50	DURING PRESSING THE SWITCH, TIME ADJUSTING FAST
S L O W	12 : 50 ↓ 12 : 55	DURING PRESSING THE SWITCH, TIME ADJUSTING SLOWLY
	12 : 55	TIME SET

2. TIMER SETTING

SET THE ENOUGH TIME TO TAKE SHELTER DURING OPERATING OF DETECTOR A & B AND MANUAL OPERATING.

DIP 1	DIP 2	DIP 3	DELAY TIME
0	0	0	0 SECOND
1	0	0	5 SECONDS
0	1	0	10 SECONDS
1	1	0	15 SECONDS
0	0	1	20 SECONDS
1	0	1	25 SECONDS
0	1	1	30 SECONDS
1	1	1	30 SECONDS

3. D.C. POWER TESTING

SINCE D.C. POWER IS Ni-Cd BATTERY, DISCHARGED, IT SHOULD BE CHECK IT ONCE PER EVERY 3 MONTHS.

SWITCH	DC LAMP	VOLTAGE INDICATING LAMP			DESCRIPTIONS
		BELOW 24V	NORMAL 24V	OVER 25V	
NORMAL			○		VOLTAGE IS NORMAL.
DC POWER TESTING	○		○		BY PRESSING THE SWITCH, THE VOLTAGE IS INDICATED AS THE CHANGED D.C. (BATTERY IS NORMAL). WHEN PRESSING THE SWITCH, YOU CAN HEAR A SOUND OF RELAY OPERATING.

4. CHECKING FOR DISCHARGING TIME AND RESET BY CLOCK

WHENFIRE EXTINGUISHING GAS IS DISCHARGED, AFTER CHECKING THE TIME OF DISCHARGING, IT CAN BE RESET BY TIME MODE

SWITCH	DISPLAY	DESCRIPTIONS
PRESSURE SWITCH ON (DISCHARGING)	TIME STOPS	INDICATE THE TIME OF DISCHARGING
PRESSURE SWITCH OFF	TIME PROCESSING	CONVERT AS TIME MODE (RESET CURRENT TIME)

5. DETECTOR SIGNAL TESTING

WITHOUT OPERATING OF DETECTOR ACTUALLY, DETECTOR SIGNAL AND MANUAL SIGNAL CAN BE TESTED.

SWITCH	DISPLAY	INDICATING LAMP	DISCRIPTIONS
NORMAL	12 : 50	A.C. POWER	CURRENT TIME
OPERATING TEST ON SIGNAL TESTING A or B	12 : 50	SWITCH LAMP FLICKERS FIRE LAMP FLICKERS DETECTOR LAMP A OR B	SIREN ALARM AFTER A PREVENTIVE SWITCH FOR WRONG OPERATING IS RUN, IT IS RESET AFTER 45 SECONDS.
OPERATING TEST ON SIGNAL TESTING A & B	30 SEC.—	SWITCH LAMP FLICKERS FIRE LAMP FLICKERS DETECTOR LAMP A OR B	VOICE ALARM TIMER OPERATING (COUNT FROM SET TIME TO 0 SECOND)
	— 0 SEC.	DISCHARGING LAMP FLICKERS	CO2 GAS DISCHARGED BY SOLENOID OPERATING PRESSURE SWITCH OPERATING SIREN ALARM
MANUAL OPERATING ON	30 SEC.— 0 SEC.—	FIRE LAMP FLICKERS MANUAL OPERATING FLICKERS	SAME AS SIGNAL TESTING A & B
RESET	12 : 50	A.C POWER	RETURN TO INITIAL STAGE

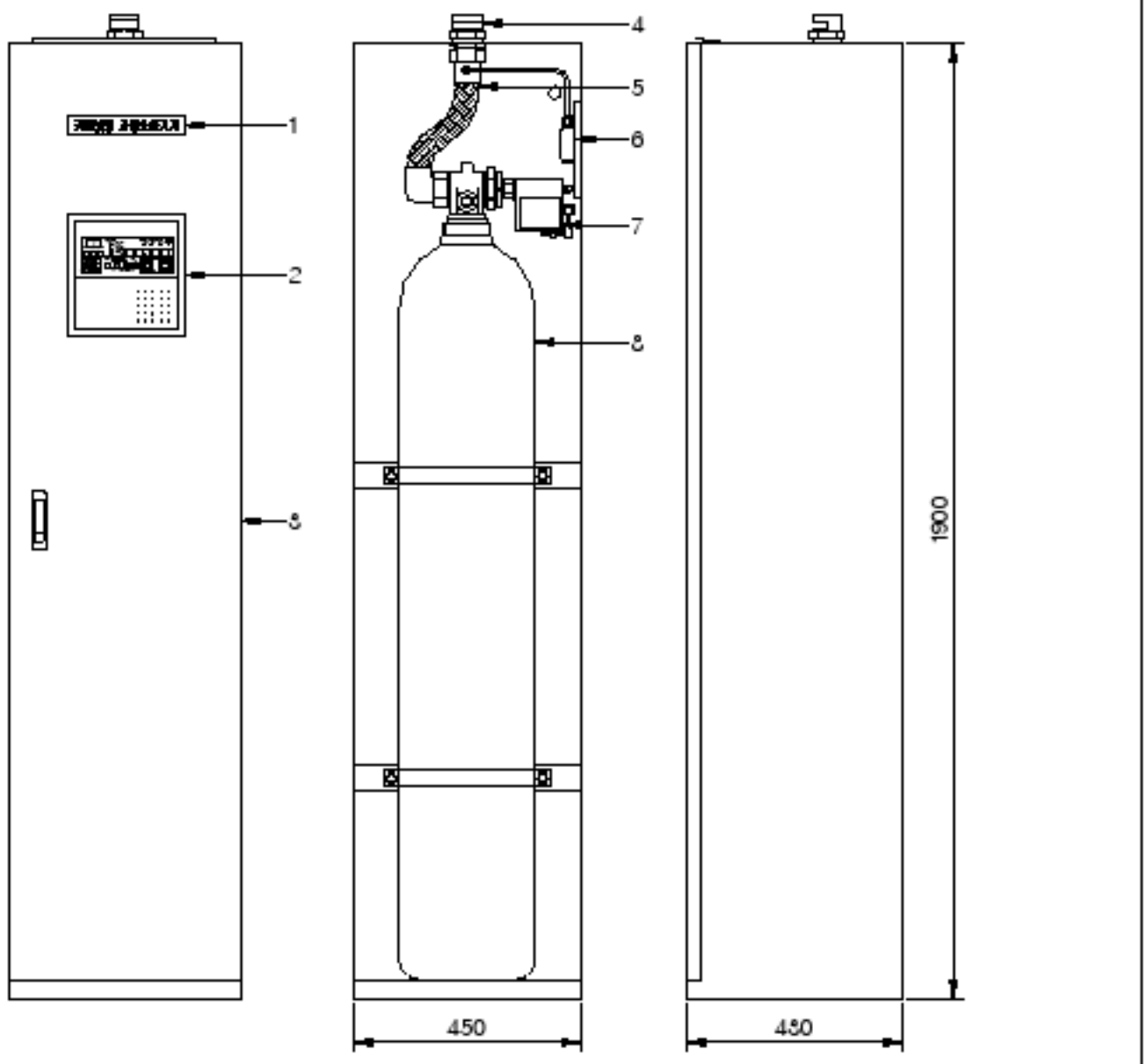
6. ENLIGHTENMENT TEST

IT IS A FUNCTION TO CHECK THE CONNECTION FOR DETECTOR AND FIRE FIGHTING SYSTEM.

SWITCH	DETECTOR LAMP	DESCRIPTIONS
DETECTOR SIGNAL TEST ON	FLICKER	DISCONNECTING OF EDGE RESISTANCE
	PUT OUT THE LIGHTS	NORMAL

TROUBLE SHOOTING

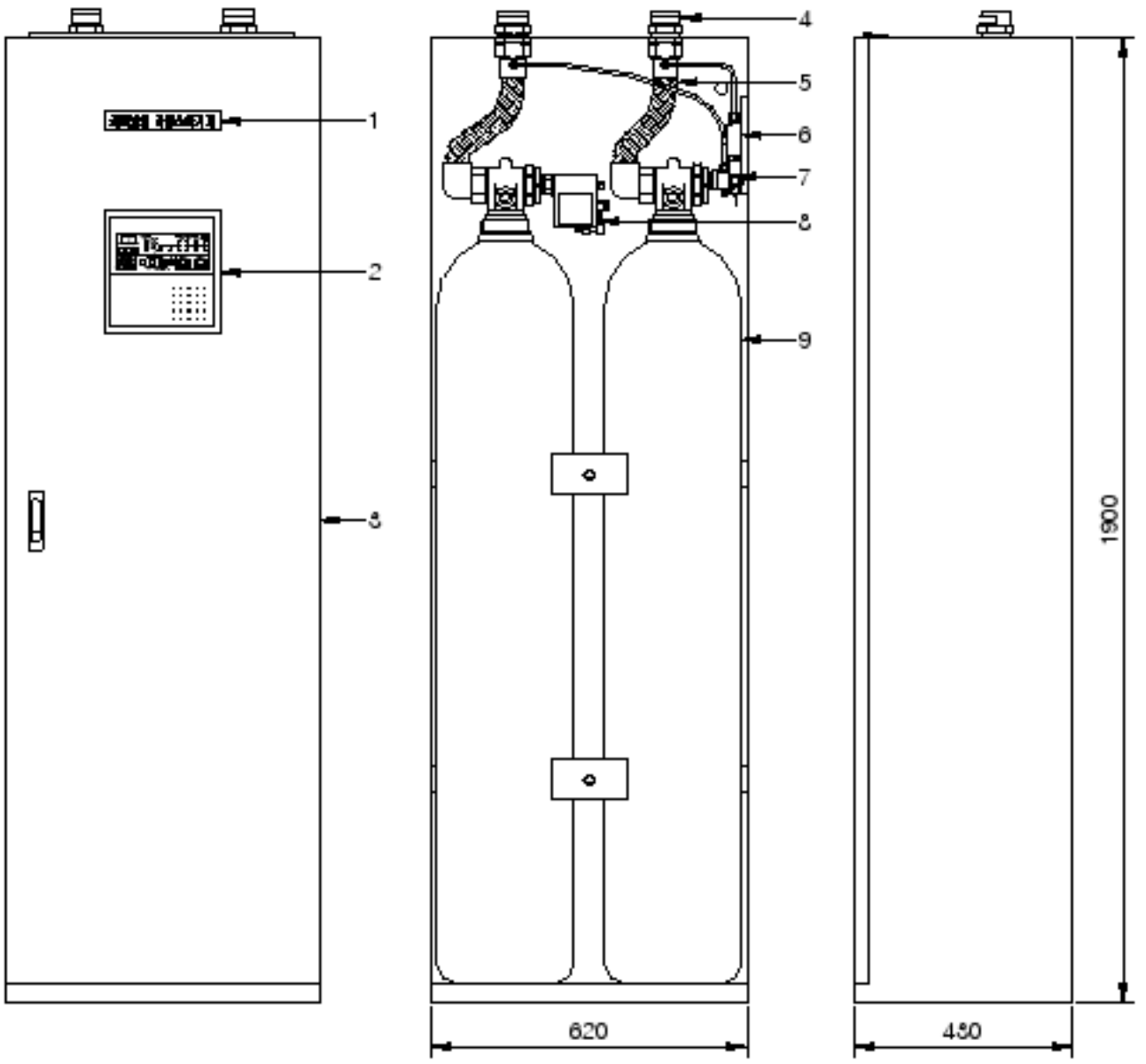
PROBABLE CAUSE	DIAGNOSIS	SOLUTION
WHEN AC POWER LAMP IS NOT TURNED ON A LIGHT	- DISCONNECTION OF POWER LINE - POWER SWITCH DEFECTIVE	- CONNECTION OF POWER - CONNECTING OF SWITCH
DETECTOR LINE LAMP IS TURNED ON A LIGHT	- DISCONNECTION OF DETECTOR LINE - DETACHING OF EDGE RESISTANCE	- CHECKING FOR DETECTOR LINE -ATTACHING OF EDGE RESISTANCE
WITHOUT FIRE, FIRE AND DETECTOR LAMP ARE TURNED ON A LIGHT	- WRONG WORKING CAUSED BY INFERIOR OF DETECTOR - DEFECTIVE OF DETECTOR LINE	- CHANGING OF DETECTOR - CHECKING FOR DETECTOR LINE
WITHOUT FIRE, FIRE AND MANUAL OPERATING LAMP ARE TURNED ON A LIGHT	- DEFECTIVE OF OPERATING SWITCH - INFERIOR OF MANUAL BOX LINE	- CHANGING OF OPERATING SWITCH - CHECKING FOR MANUAL BOX LINE
WITHOUT FIRE, DISCHARGING LAMP IS ON	- OPERATING OF PRESSURE SWITCH - INFERIOR OF PRESSURE SWITCH	- PRESSURE SWITCH OFF - CHANGING OF PRESSURE SWITCH
DC POWER LAMP IS ON A LIGHT	- DC POWER SWITCH OFF - DEFECTIVE BATTERY	- DC POWER SWITCH ON - CHANGING OF BATTERY
INDICATING LAMP IS TURNED ON A LIGHT AS 22V OR 26V	- TROUBLE WITH INPUT POWER	- CHECKING OF 220V SWITCH
DETECTOR AND MANUAL OPERATION IS NOT RUN.	- RESET SWITCH OUTSIDE ON - INFERIOR OF DETECTOR - DEFECTIVE MANUAL BOX	- RESET SWITCH OFF - CHECKING OF DETECTOR - CHECKING OF MANUAL BOX LINE
SIREN AND VOICE ALARM ARE NOT SERVICED.	- ALARM STOP SWITCH OFF	- ALARM STOP SWITCH ON
SOLENOID IS NOT RUN.	- INFERIOR OF SOLENOID - DEFECTIVE SOLENOID LINE - VALVE STOP SWITCH OFF - OPERATING OF PRESSURE SWITCH	- CHANGING OF SOLENOID - CHECKING OF CONNECTION LINE - VALVE STOP SWITCH ON - PRESSURE SWITCH OFF



PARTS NAME

1. NAME PLATE
2. CONTROL PANEL
3. CABINET
4. DISCHARGE NOZZLE
5. FLEXIBLE
6. PRESSURE S/W
7. SOLENOID VALVE
8. CYLINDER

Dong-Shin Fire ..Co.Ltd		TITLE	Package Type Automatic Fire Extinguishing System
		SUBJECT	1B/T
DRAWN BY J.D.Y	CHEKED BY		
APPROVED BY	SCALE NONE	DATE 2009/01	DWG' NO



PARTS NAME

1. NAME PLATE
2. CONTROL PANEL
3. CABINET
4. DISCHARGE NOZZLE
5. FLEXIBLE
6. PRESSURE S/W
7. NEEDLE VALVE
8. SOLENOID VALVE
9. CYLINDER

Dong-Shin Fire .,Co.Ltd		TITLE	Package Type Automatic Fire Extinguishing System
		SUBJECT	28/T
DRAWN BY J.D.Y	CHEKED BY		
APPROVED BY	SCALE NONE	DATE 2008/01	DWG' NO