

Honeywell

IPC1000

IPC1000()
IPC1000

IPC1000

1. 가

2.

3.

4.

5. 가

6.

| |
|--|
| |
|--|

가 .

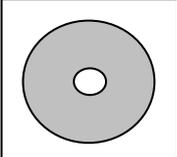
| | |
|---|---|
|  | “ ” |
|  | Frame Ground |
|  | (1) " " . (2) " " Hardware System Down |

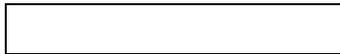
| |
|--|
| |
|--|

| | |
|---|------------------------|
|  | " 가 " |
|  | (1) " " . (2) " " 가 |

IPC1000

1. ()
- 2.
- 3.

| | | | |
|---|---------|---|--|
| | | | |
|  | IPC1000 | 1 | IPC1000-R : LonWorks : IPC1000-L |
|  | | 2 | |
| CD  | | 1 | RS-232 IPC1000 IPC1000 |



| | | | |
|-------------------|-----------------------|----|----|
| 1. | | 1 | |
| 1.1 | | 1 | |
| 1.2 | | 1 | |
| 1.3 | | 2 | |
| 2. | | 3 | |
| 2.1 | | 3 | |
| 2.2 | | 4 | |
| 2.3 | | 4 | |
| 2.4 | | 5 | |
| 2.5 | | 5 | 10 |
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| 4.7 | | 38 | |
| 4.8 | | 39 | |
| 4.9 | | 40 | |

1.

1.1 : IPC1000

1.2

| No | | No | | No | | | |
|----|---|---------------|--------|-------------------|-------------------|----------|-----------|
| 1 | <input type="checkbox"/> AC 85 264V FG NC | 21 | A | Pt100 / JPt100 | 41 | COM | |
| 2 | | 22 | B | | 42 | RUN/STOP | |
| 3 | | 23 | B | | 43 | , 1 | |
| 4 | | 24 | A | 44 | , 2 | | |
| 5 | (SSR) | 25 | B | Pt100 / JPt100 | 45 | , 3 | |
| 6 | | 26 | B | | 46 | , 4 | |
| 7 | | 27 | + | DC4 20 mA | 47 | , 5 | |
| 8 | | 28 | - | | 48 | , 6 | |
| 9 | | 29 | NC | COMMON | 49 | , 7 | |
| 10 | | 30 | COMMON | | 50 | , 8 | |
| 11 | | 31 | COMMON | | 51 | , 9 | |
| 12 | | TROUBLE | 32 | SSR | | | |
| 13 | | INNER SIGNAL1 | 32 | SSR | | | |
| 14 | | INNER SIGNAL2 | | SSR | | | |
| 15 | | INNER SIGNAL3 | | | | 1 | |
| 16 | | INNER SIGNAL4 | | | | 2 | BLOWER |
| 17 | | TIME SIGNAL1 | | 33 | + | 3 | OVER TEMP |
| 18 | | TIME SIGNAL2 | | 34 | - | 4 | DRY TEMP |
| 19 | | TIME SIGNAL3 | | 35 | + | 5 | WET TEMP |
| 20 | | TIME SIGNAL4 | | 36 | - | 6 | 1 |
| | | 37 | + | 7 | 2 | | |
| | | 38 | - | 8 | No Water | | |
| | | 39 | + | 9 | No Water Pressure | | |
| | | 40 | - | | | | |

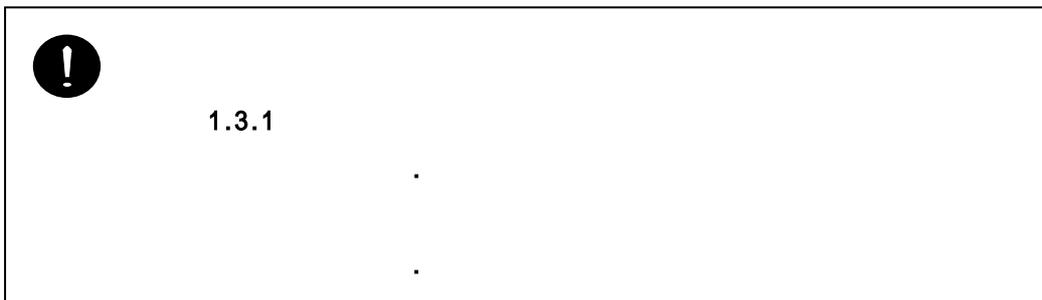
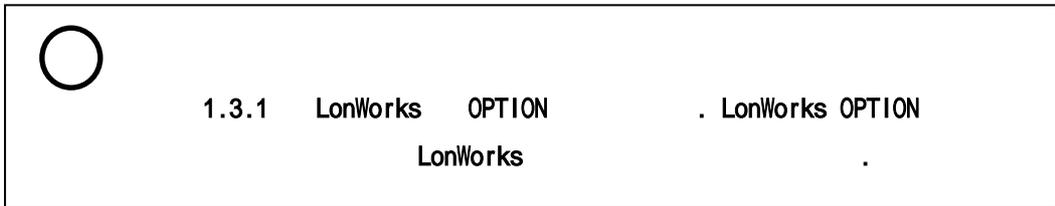
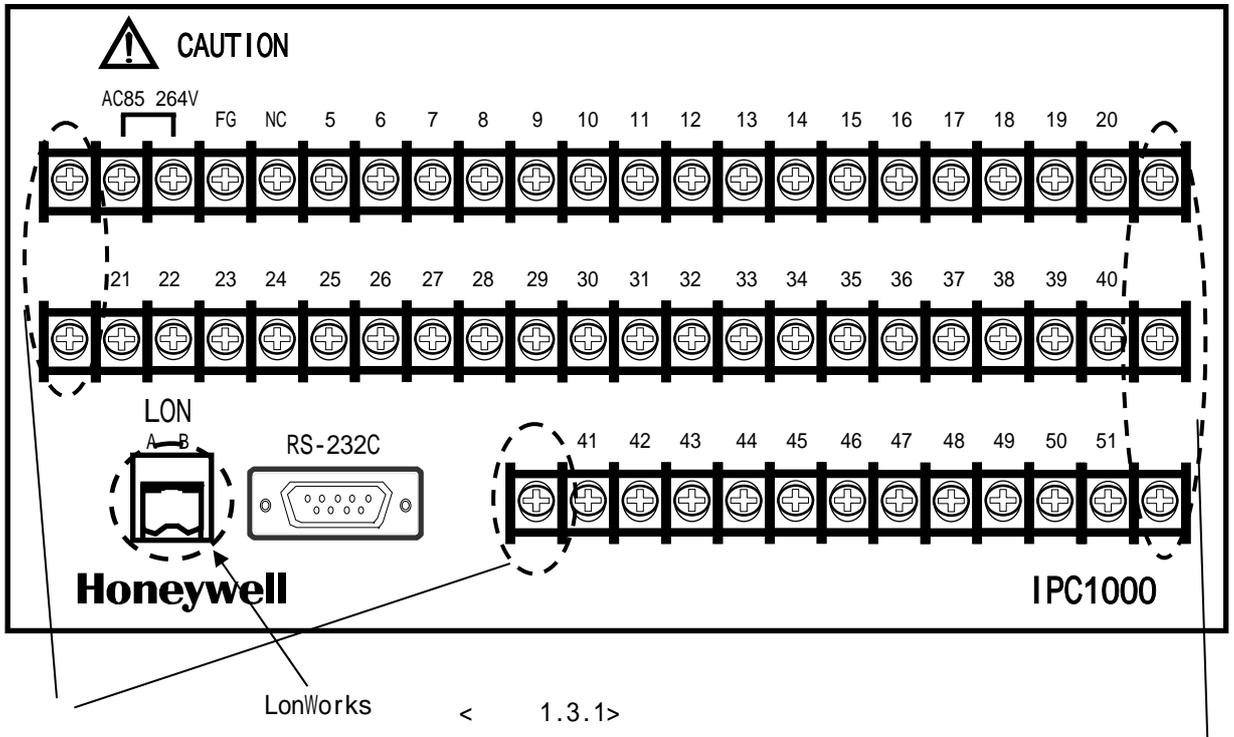


CONTROL SET (3.2.1) SIGNAL SELECT I.S

TIME SIGNAL 1,2,3,4 INNER SIGNAL 5,6,7,8 .

(17, 18, 19, 20)

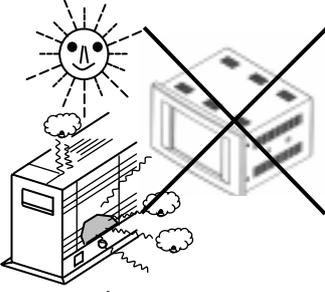
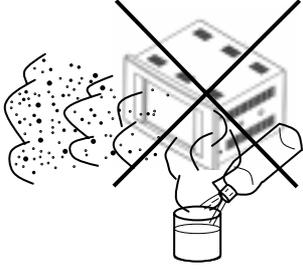
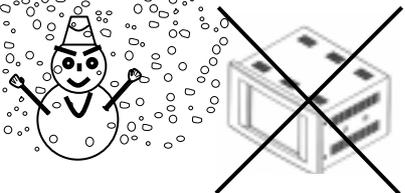
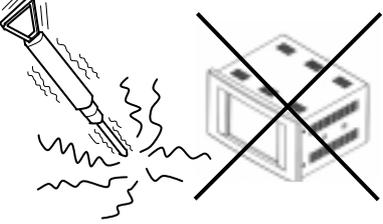
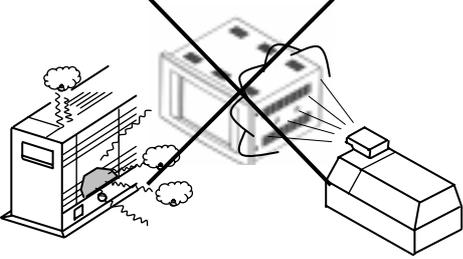
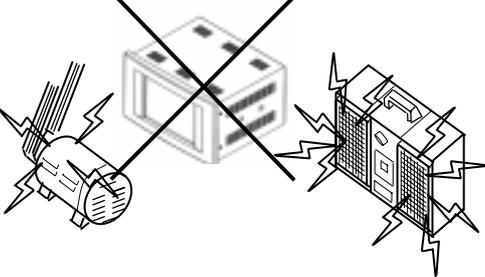
1.3



2.

2.1


IPC1000

| | |
|--|---|
|  가 50 |  가 , 가 , 가 |
|  가 0 |  |
|  가 85% |  |

2.2

IPC1000()

- , 가 .
- 1)
 - 2) (,)
 - 3) , 가 가,
 - 4)

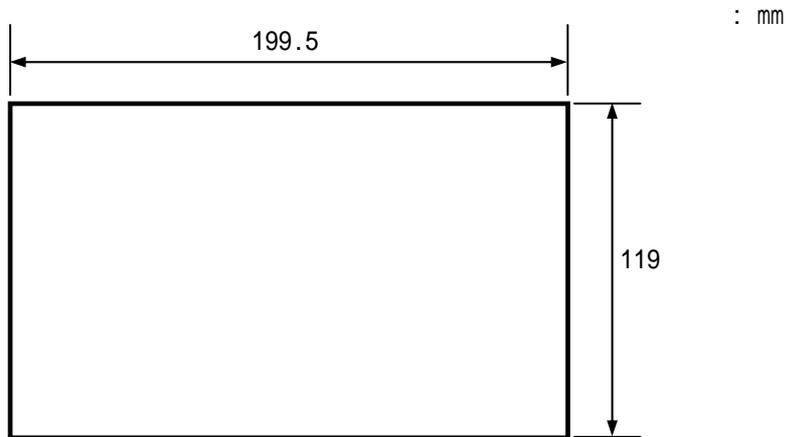
5) IPC1000

- FG
- 6)
 - 7) , 1

8) IPC1000

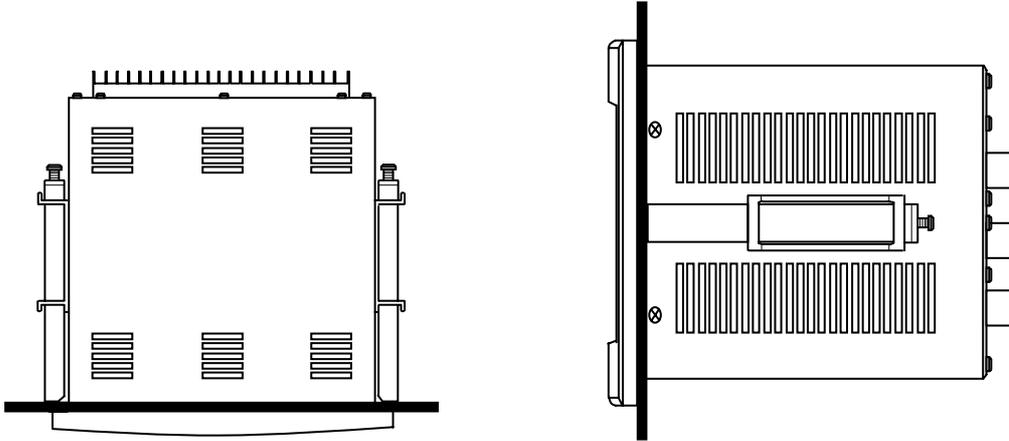
- 가 .
- 9) 0 2 2

2.3

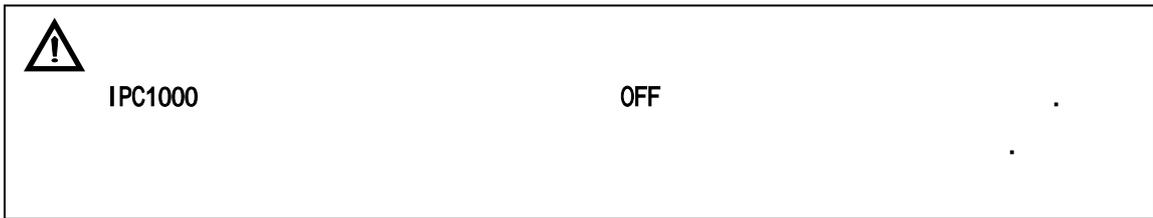


< 2.3.1 >

2.4

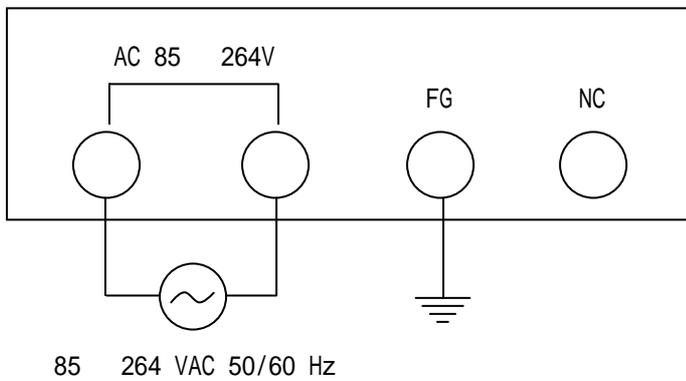


< 2.4.1 >



2.5

1)



< 2.5.1 >



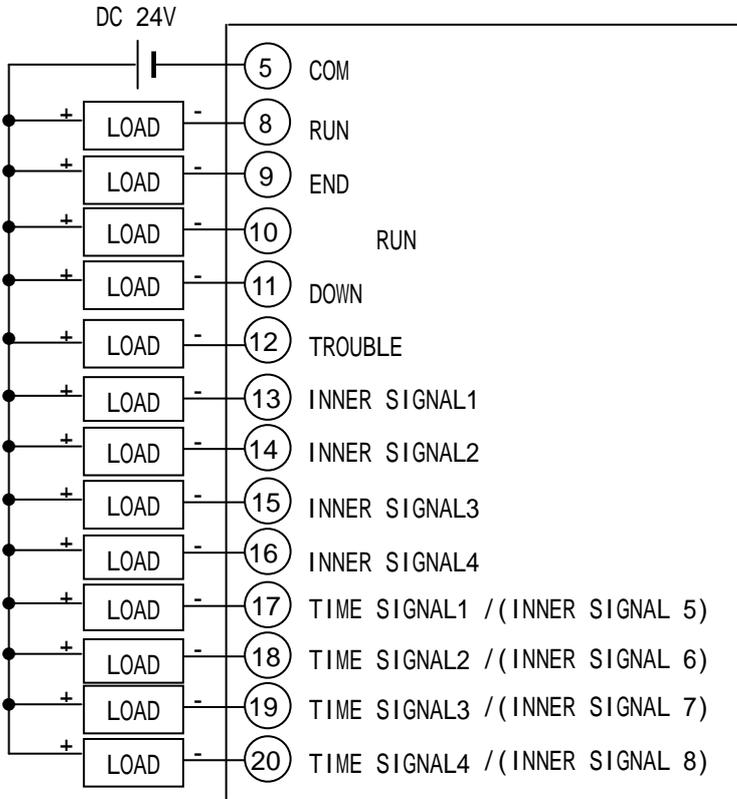
2.5.1

2.5.2 Frame Ground(FG)

.

.

2) (SSR)



 **IPC1000** Open Collector
 30VDC, 50mA ,
 47 Ω
 . LOAD
 24VDC

< 2.5.3 >



1. RUN

: 8

: ON .

가 "STOP", "END", "READY", "BREAK", "TROUBLE"

OFF , 가 "RUN", "HOLD", "WAIT",

"COLD", "HOT" ON .

2. END

: 9

: ON ,

OFF .

3. RUN

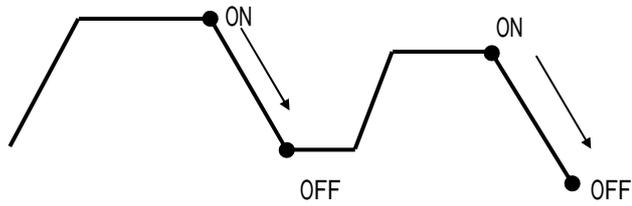
: 10

:
OFF . ON ,

4. DOWN

: 11

:
SP 2.5.4
ON , WAIT 가
ON 가 WAIT 가 OFF 가
OFF 가 .



< 2.5.4> DOWN SSR ON-OFF

5. TROUBLE

: 12

: ALARM 1 9(43,44,45,46,47,48,49,
50,51) ON TROUBLE ON .
TROUBLE OFF 가 TROUBLE OFF 가
TROUBLE "CLEAR"
. TROUBLE
OFF .

6. INNER SIGNAL 4 TIME SIGNAL 4

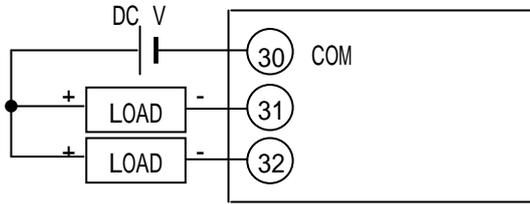
:

| | | | |
|----------------|----|---------------|----|
| INNER SIGNAL 1 | 13 | TIME SIGNAL 1 | 17 |
| INNER SIGNAL 2 | 14 | TIME SIGNAL 2 | 18 |
| INNER SIGNAL 3 | 15 | TIME SIGNAL 3 | 19 |
| INNER SIGNAL 4 | 16 | TIME SIGNAL 4 | 20 |

:

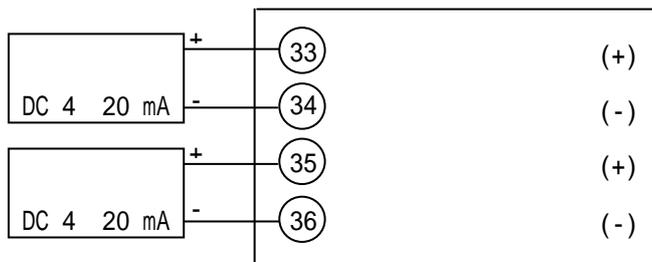
| | | |
|--------------|---------|---------|
| INNER SIGNAL | PAGE 20 | 25 |
| TIME SIGNAL | " | " 30 32 |

3) (SSR) (PID)



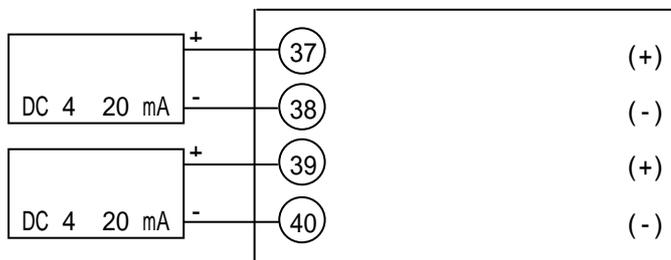
< 2.5.5>

4) (PID)



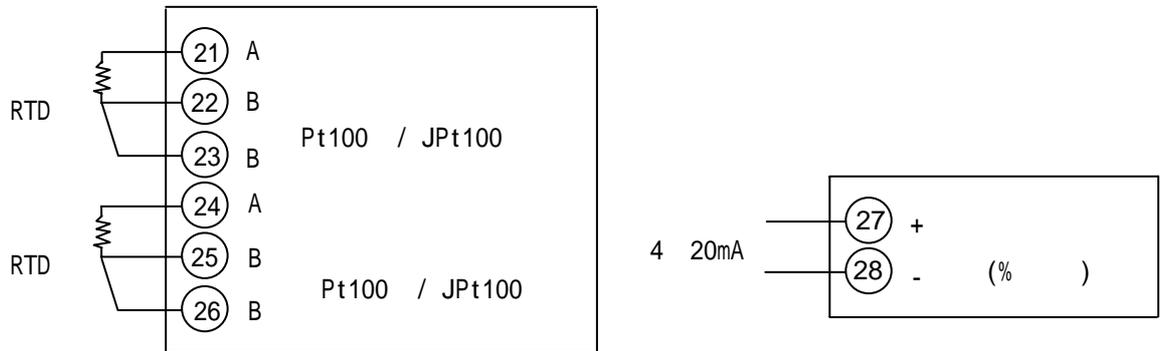
< 2.5.6>

5)



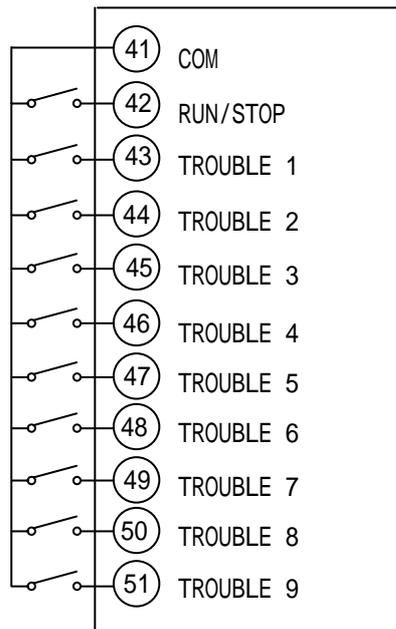
< 2.5.7>

6)



< 2.5.8 >

7)



< 2.5.9 >



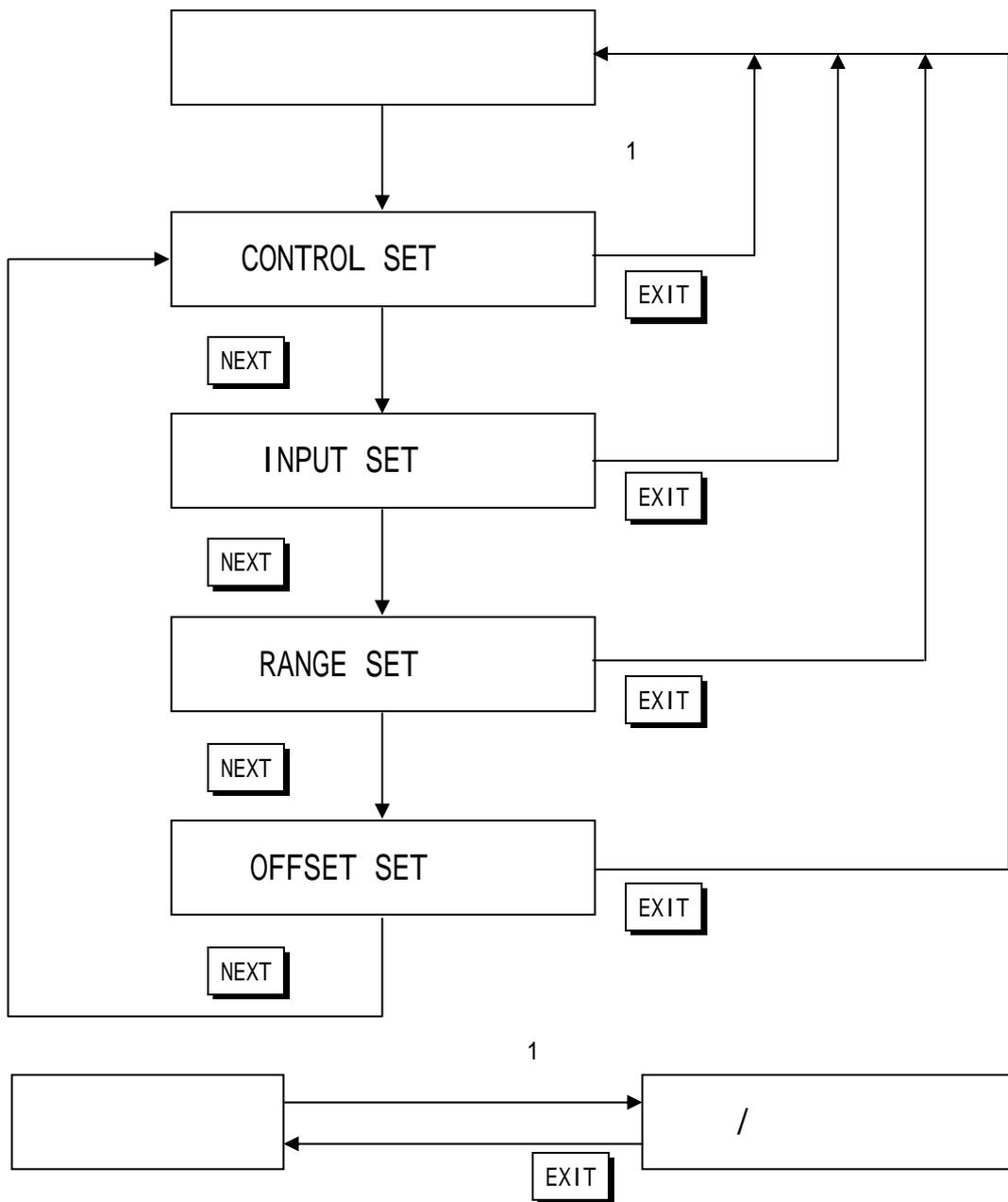
ON/OFF

3. IPC1000 SET UP

3.1.1

3.1

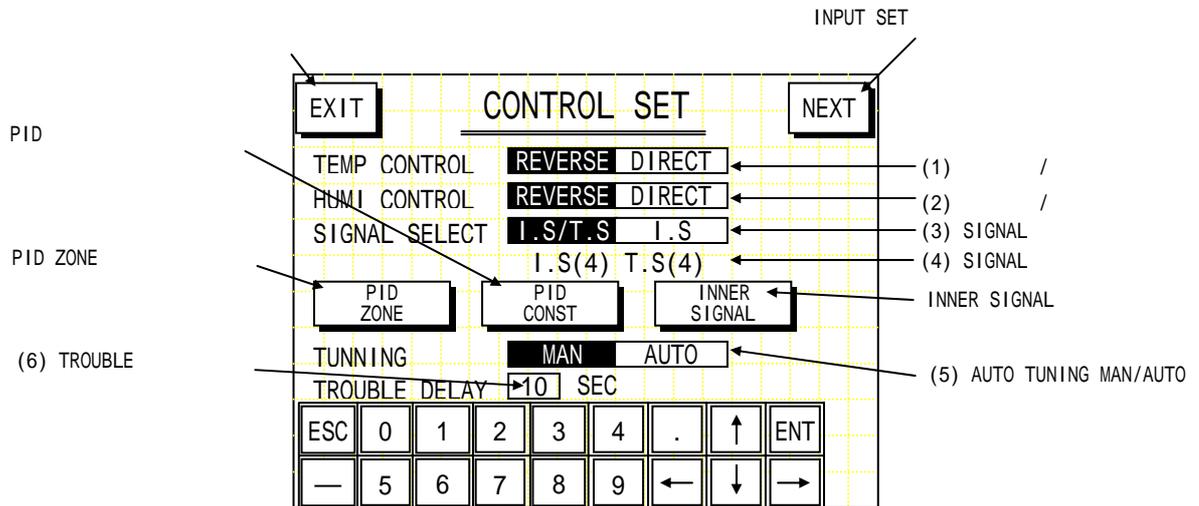
ROTATION (3.1.1) , _____
(CONTROL SET) 1
_____.



< 3.1.1 >

3.2 CONTROL SET

, DIGITAL , PID , AUTO TUNING



< 3.2.1 >

1.

REVERSE (1) . REVERSE

DIRECT (1) . DIRECT

2.

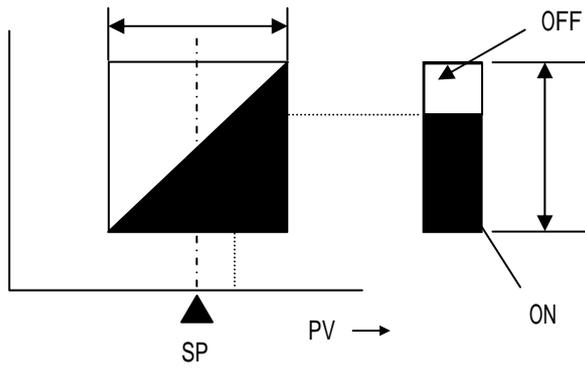
REVERSE (2) . REVERSE

DIRECT (2) . DIRECT



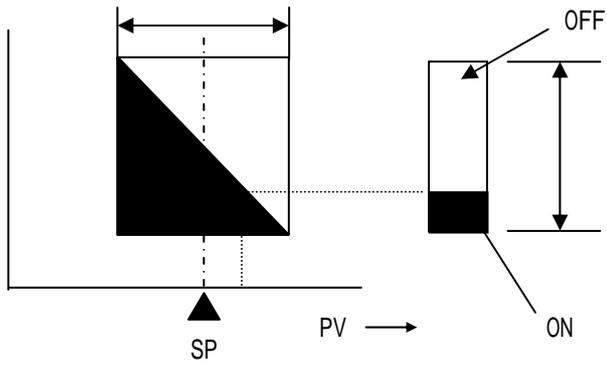
/

1. (DIRECT) : ,



< 3.2.2 >

2. (REVERSE) : 가 , 가



< 3.2.3 >

3. INNER(4)/TIME(4) SIGNAL INNER(8) SIGNAL
 IPC1000 4 INNER SIGNAL TIME SIGNAL ,
 INNER SIGNAL 8 .(, INNER SIGNAL 8
 TIME SIGNAL 4 .)

INNER SIGNAL 4 TIME SIGNAL 4
 3.2.1 (3) . I.S/T.S
 , SIGNAL (4)가 "I.S(4) T.S(4)" .

INNER SIGNAL 8
 3.2.1 (3) . I.S
 SIGNAL (4)가 "I.S(8)" .

| | | | |
|----------------|------|----------------|------|
| I.S/T.S | | I.S | |
| INNER SIGNAL 1 | : 13 | INNER SIGNAL 1 | : 13 |
| INNER SIGNAL 2 | : 14 | INNER SIGNAL 2 | : 14 |
| INNER SIGNAL 3 | : 15 | INNER SIGNAL 3 | : 15 |
| INNER SIGNAL 4 | : 16 | INNER SIGNAL 4 | : 16 |
| TIME SIGNAL 1 | : 17 | INNER SIGNAL 5 | : 17 |
| TIME SIGNAL 2 | : 18 | INNER SIGNAL 6 | : 18 |
| TIME SIGNAL 3 | : 19 | INNER SIGNAL 7 | : 19 |
| TIME SIGNAL 4 | : 20 | INNER SIGNAL 8 | : 20 |

4. AUTO TUNING MAN/AUTO
 AUTO TUNING

AUTO TUNING MAN
 3.2.1 (5) . MAN
 MAN (,) AUTO TUNING
 , AUTO TUNING

AUTO TUNING AUTO
 3.2.1 (5) . AUTO
 AUTO (,) AUTO TUNING
 , AUTO TUNING

5. TROUBLE

TROUBLE

TROUBLE

1 99

(6)
ENT

가

, ESC

3.3 PID ZONE

PID

6 ZONE

(SP)

ZONE

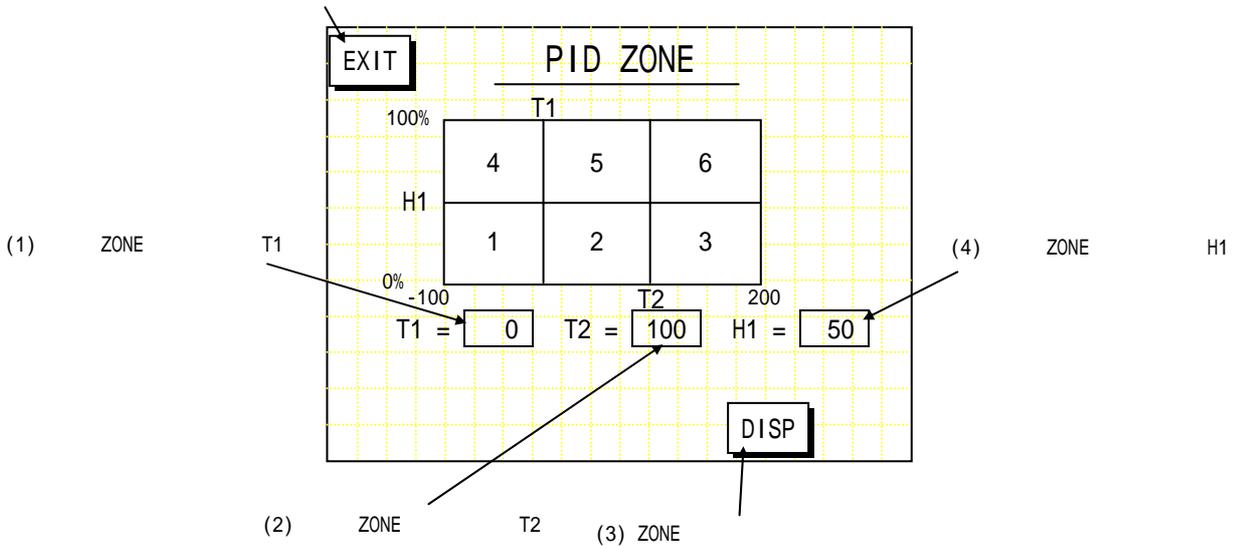
PID

ZONE 5

1

PID

CONTROL SET



< 3.3.1 >

1. T1 (1), T2 (2), H1 (4)

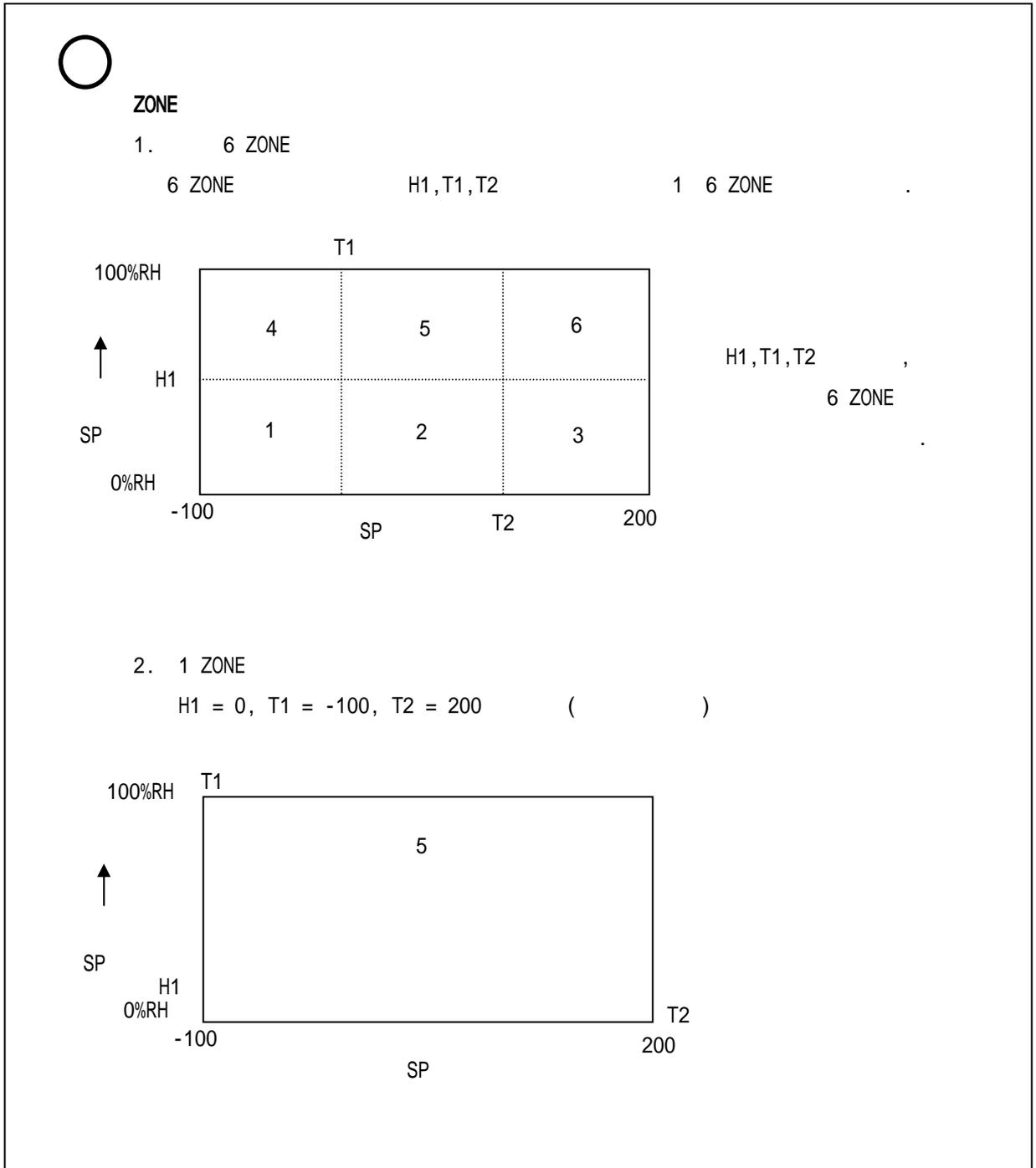
가

ENT

, ESC

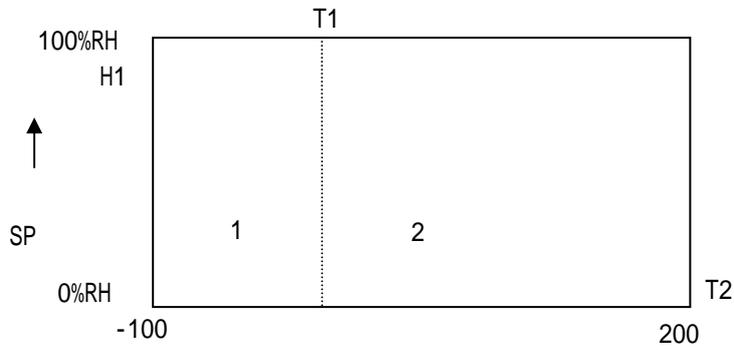
2. 1 DISP (3) ZONE 3.3.1

3. T1 T2 -100 200 , H1 0 100%RH



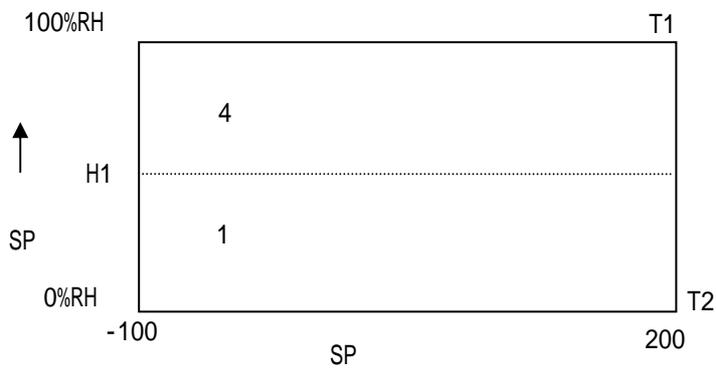
3. 2 ZONE

H1 = 100, T2 = 200 . T1 ZONE



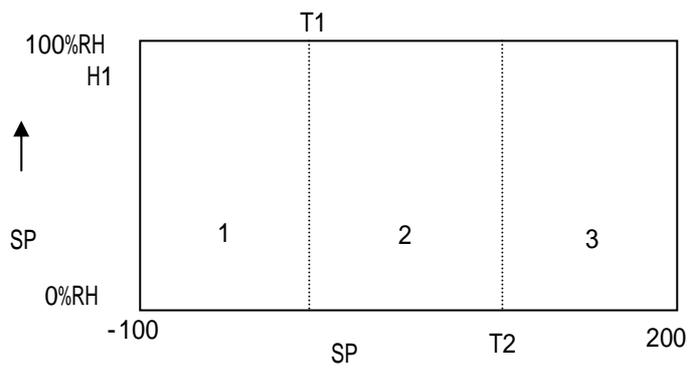
4. 2 ZONE

T1 = 200, T2 = 200 . H1 ZONE



5. 3 ZONE

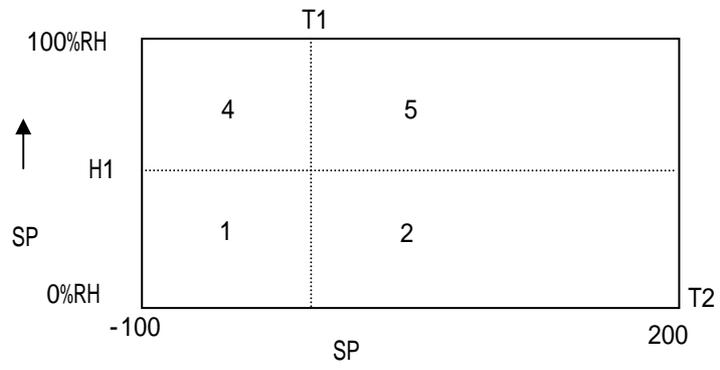
H1 = 100 . T1, T2 ZONE



6. 4 ZONE

T2 = 200

. H1, T1 ZONE



가

T1

T2

T1 > T2

T2

T1

3.4 PID CONST

ZONE P,I,D, ARW , AUTO TUNING PID
 ZONE .

CONTROL SET

ZONE PID

| | | P(%) | I (SEC) | D(SEC) | ARW(%) |
|---|------|------|---------|--------|--------|
| 1 | TEMP | 50.0 | 005 | 005 | 000 |
| | HUMI | 50.0 | 008 | 009 | 100 |
| 2 | TEMP | 50.0 | 005 | 005 | 000 |
| | HUMI | 50.0 | 005 | 005 | 000 |
| 3 | TEMP | 50.0 | 005 | 005 | 000 |
| | HUMI | 50.0 | 008 | 009 | 100 |

PAGE

1,2,3 4,5,6

< 3.4.1 >

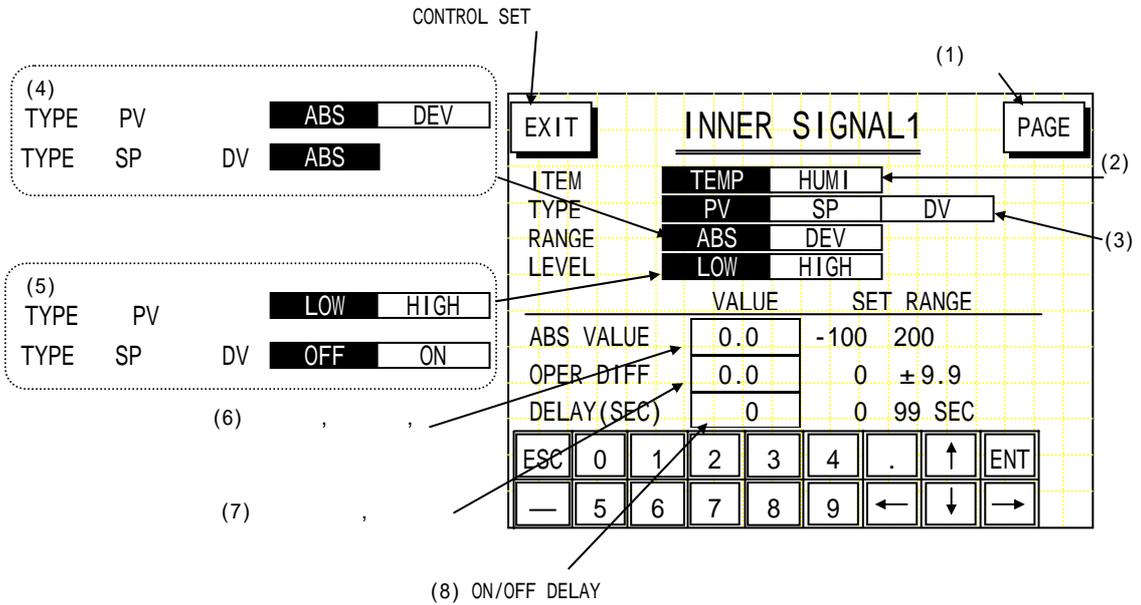
1. 가 , PID
 ARW ENT , ESC .

2. ZONE PID ARW .
 P = 5.0 % , I = 120 , D = 30 , ARW = 100 %

3.
 P() : 0.0 999.9 %
 I() : 0 3600
 D() : 0 3600
 ARW : 0 100 %

3.5 INNER SIGNAL

DIGITAL INNER SIGNAL



< 3.5.1 >

1. /PV/ABS/HIGH, (ABS VALUE), (OPER DIFF), DELAY(SEC)
 - (2) TEMP . TEMP .
 - (3) PV . PV .
 - (4) ABS . ABS .
 - (5) HIGH . HIGH .
 - (6) SET RANGE
 - (7) 가 .(: -100 200)
 - SET RANGE 가 .(: 0 ±9.9)
 - DELAY (8) DELAY . DELAY
 - SET RANGE 가 .(0 99 SEC)

2. /PV/DEV/HIGH, (DEV VALUE), (OPER DIFF), DELAY(SEC)
 - (2) TEMP . TEMP .
 - (3) PV . PV .
 - (4) DEV . DEV .
 - (5) HIGH . HIGH .

(6) SET RANGE
가 .(: -99.9 99.9)
(7)
SET RANGE 가 .(: 0 ±9.9)
DELAY (8) DELAY . DELAY
SET RANGE 가 .(0 99 SEC)

3. /SP/ABS/ON, (MIN VALUE), (MAX VALUE), DELAY(SEC)
(2) TEMP . TEMP .
(3) SP . SP .
SP ABS .
(5) ON . ON .
(6)
SET RANGE 가 .(: -100 200)
(7)
SET RANGE 가 .(: -100 200)
DELAY (8) DELAY . DELAY
SET RANGE 가 .(0 99 SEC)

4. /DV/ABS/ON, (MIN VALUE), (MAX VALUE), DELAY(SEC)
(2) TEMP . TEMP .
(3) DV . DV .
DV ABS .
(5) ON . ON .
(6)
SET RANGE 가 .(: -100 200)
(7)
SET RANGE 가 .(: -100 200)
DELAY (8) DELAY . DELAY
SET RANGE 가 .(0 99 SEC)


가
SP DV

>

,

5.

(,)

6. INNER SIGNAL PAGE

INNER SIGNAL

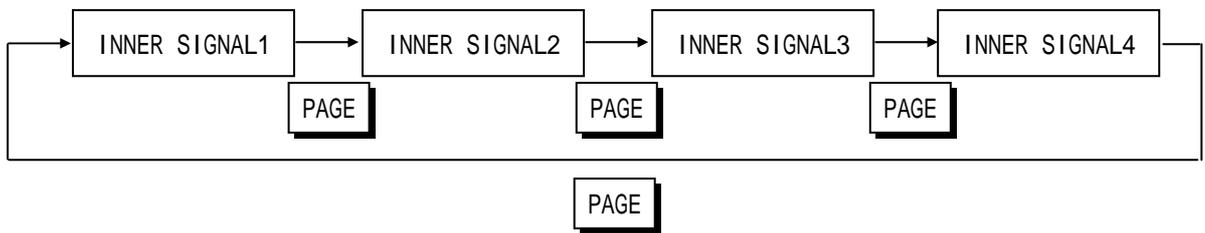
INNER SIGNAL NO.1

INNER SIGNAL

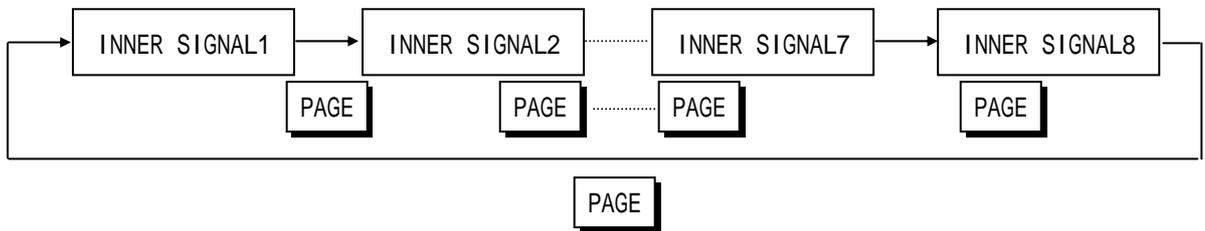
3.5.1 PAGE

3.5.2

3.5.3



< 3.5.2> I.S/T.S



< 3.5.3> I.S

[LOW : (가) (가) PV가 () OFF
 HIGH : () () PV가 () ON

3. :
 PV / ABS (LOW HIGH)
 () , , DELAY .

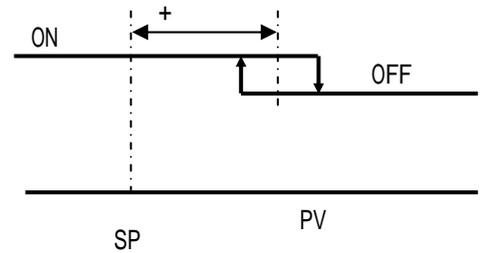
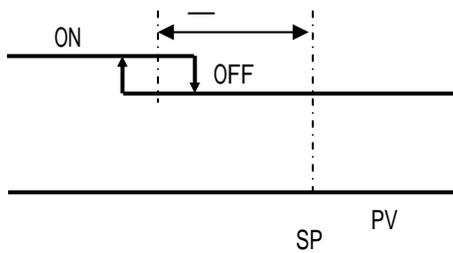
PV / DEV (LOW HIGH)
 , , DELAY .

SP DV (ON OFF)
 , , DELAY .

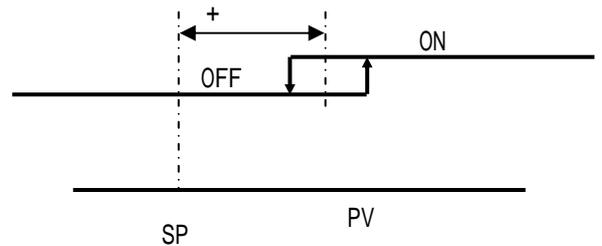
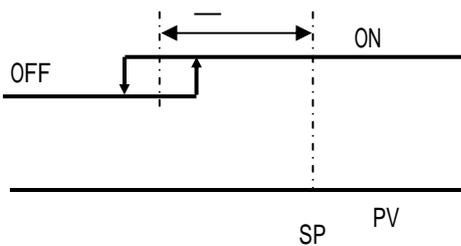
DELAY : ON OFF DELAY
 . DELAY .

4. PV, DEV

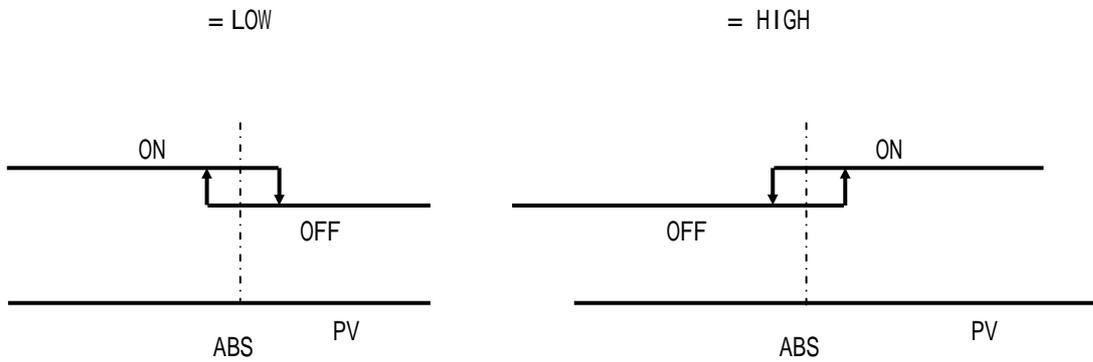
= LOW



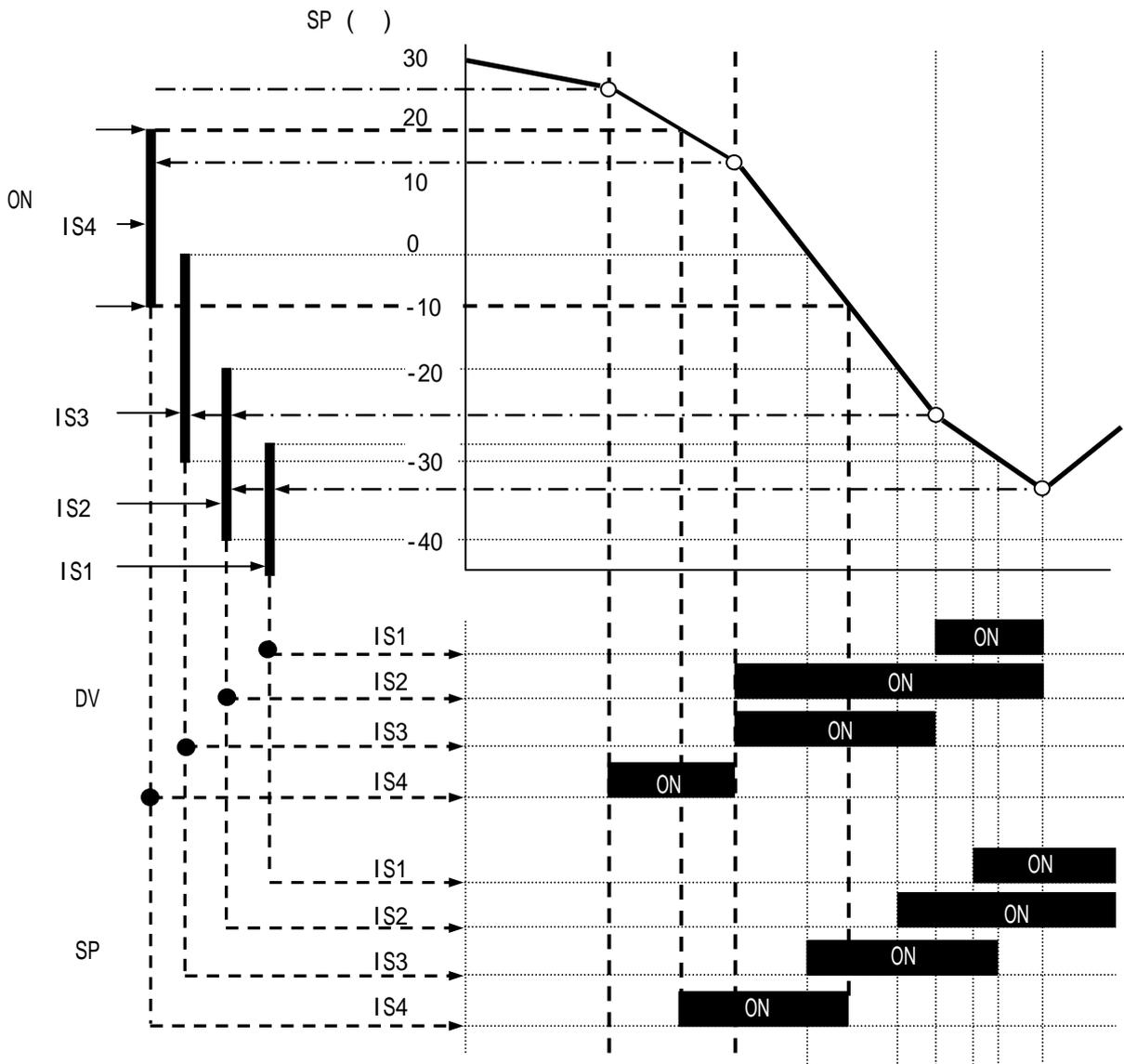
= HIGH



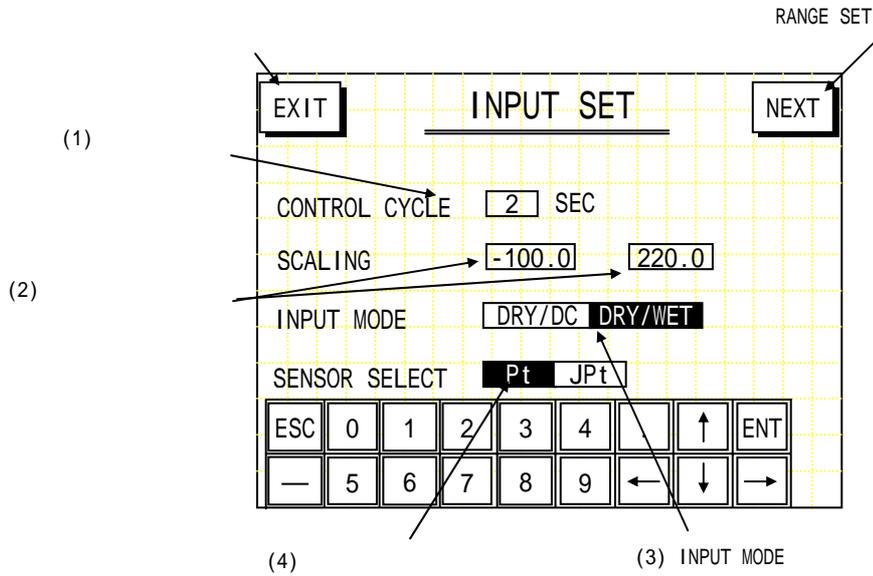
5. PV, ABS



6. SP DV



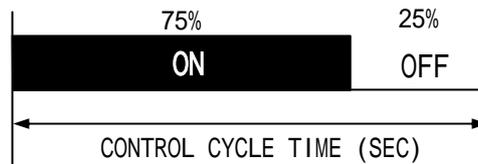
3.6 INPUT SET



< 3.6.1 >

1. CYCLE

(1) 가 , ENT , ESC
3.6.2 .



< 3.6.2 > MV = 75%

2.

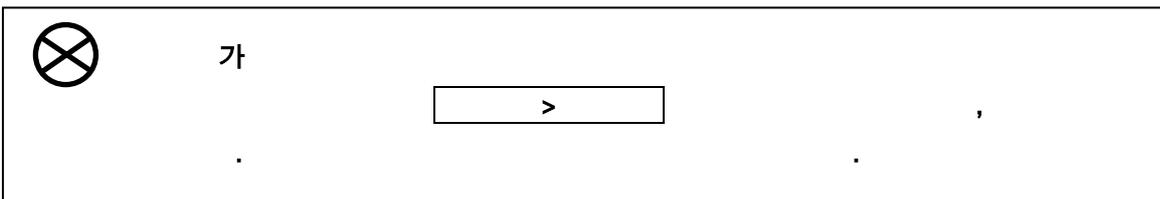
(2) 가 ,
4 mA SCALE .
(2) 가 , 20 mA SCALE
SCALING 4 20mA
) SCALING 0 90 가 0
4mA 가 90
20mA , 가 0 90
4 20mA
(SCALING -100.0 220.0)
(4 20mA) 0 100%RH

3.

INPUT MODE (3) DRY/WET
DRY/WET () ()
INPUT MODE (3) DRY/DC
DRY/DC () (4 20mA)
4 20mA

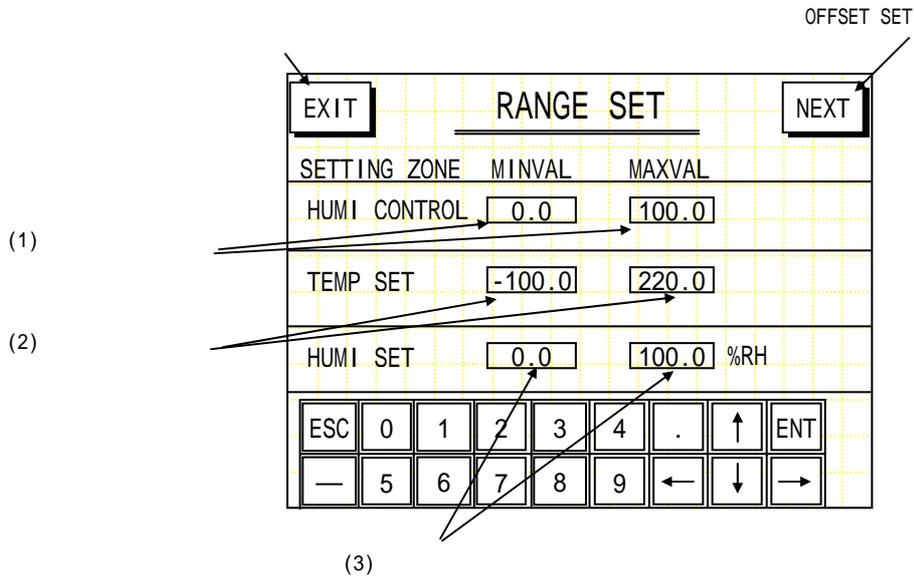
4.

/ Pt100 JPt100
Pt100
 (4) Pt
JPt100
 (4) JPt



3.7 RANGE SET

/



< 3.7.1 >

1.

(SP)

" — . — "

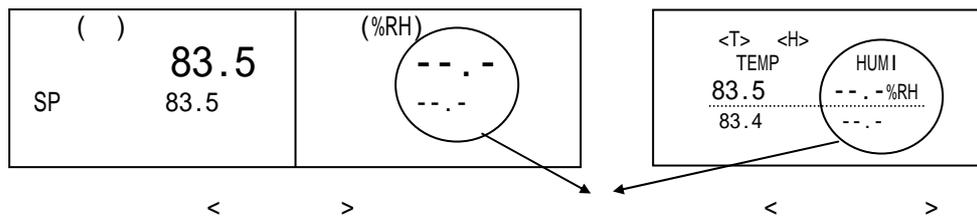
3.7.2

(1)

가 ,

(1)

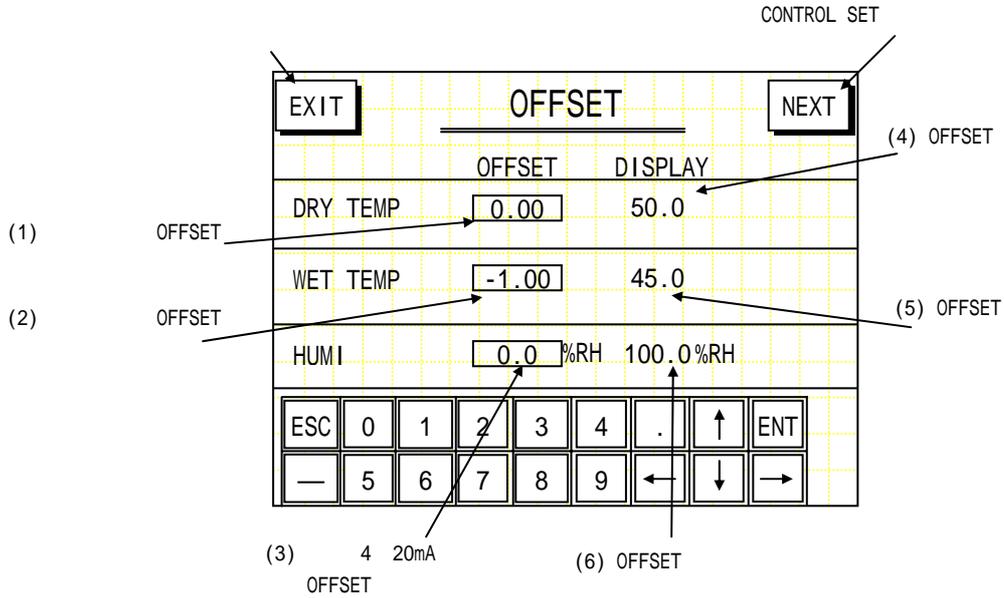
가 ,



< 3.7.2 >

3.8 OFFSET

(4 20mA) OFFSET



< 3.8.1 >

1. OFFSET

OFFSET (1) 가 , OFFSET

DRY/DC DRY/WET

) 50.0 OFFSET +1.00

PV 51.00 가 +1 , OFFSET -1.00

49.00 가 -1

PV (4)

: -9.99 +9.99

2. OFFSET

OFFSET (2) 가 , OFFSET

DRY/WET

) 50.0 OFFSET +1.00

PV 51.00 가 +1 , OFFSET -1.00

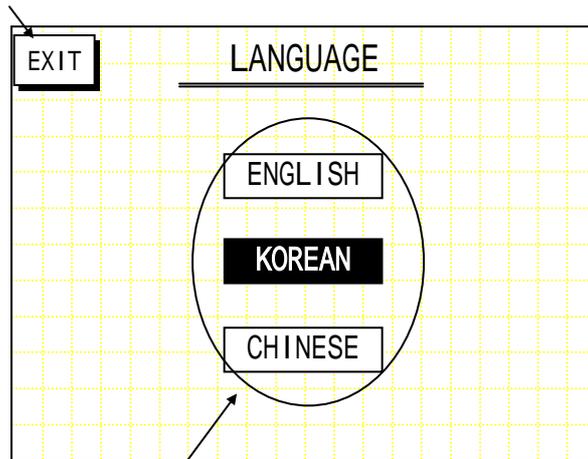
49.00 가 -1

PV (5)

: -9.99 +9.99

3. 4 20mA OFFSET
 4 20mA OFFSET (3) 가 ,
 OFFSET
 DRY/DC
) 50.0%RH OFFSET +1.0%RH
 PV 51.0%RH 가 +1%RH , OFFSET
 -1.0%RH 49.0%RH 가 -1%RH
 PV (6)
 : -9.9 +9.9 %RH

3.9 LANGUAGE



/ /

< 3.9.1 >

4. SPECIFICATION

4.1

| | | |
|-----|--|--|
| | | |
| | | -100.0 220.0 |
| | | 0.0 100.0%RH |
| | | 0.00 99.99 () |
| | | (LCD) |
| | | 86.37()X115.17()mm |
| | | 240()X320() |
| | | CCFL (Brightness : 100 cd/m ²) |
| | | 40 X30 (8X8) |
| | | () |
| A/D | | 15 (300 0.01) |
| | | ±0.1%FS+1digit |
| | | ±1%RH FS+1digit |
| | | 0.01 / 0.1 가 |
| | | 1 |
| | | ±10 PPM(25), -10 70 :+10/-120 PPM) |
| | | , 5 : 2 (, Full Charge) |
| | | EEPROM , 10 |
| | | AC 85 264 V 50/60Hz |
| | | - : DC500V 20M |
| | | - : AC1500V 1 |
| | | 0 50 |
| | | : (), : |
| | | |
| | | 210mm(가)X130mm()X188mm() |
| | | 199.5mm(가)X119mm() |

4.2

| | | |
|------------------------|---------------------------------------|---|
| | | 1) : Pt100 ,JPt100 (가) : Pt100 ,JPt100 (가) 2) : Pt100 ,JPt100 (가) : 4 20mA |
| RUN/STOP | | X 1 (RUN/STOP) |
| | | X 9 (9) OFF , 9 |
| | PID | X1 |
| | PID | X1 |
| | PID | DC 4 20mA X1(500) |
| | PID | DC 4 20mA X1(500) |
| | 1) () / (가) 가 2) /DC4 20mA (가) | |
| INNER SIGNAL | | ON / OFF X 4 X 8 , , 가 / , / LOW / HIGH, ON / OFF, ×4, ×8 가 (, INNER SIGNAL 8 TIME SIGNAL) |
| RUN | | X 1 |
| END | | X 1 |
| TIME SIGNAL | | X 4 |
| DOWN | | X 1 |
| TROUBLE | | X 1 |
| | | : 4 20mA -100 220 (가) : 4 20mA 0 100%RH() |
| | | RS232(), LonWorks(OPTION) |
| MAX DC30V, MAX50mA/1ch | | 47 |

4.3

| | |
|---------------|---|
| | |
| | 1 800 (800) |
| | 1 99 59 |
| | 1 30(30) |
| | 6 가 |
| | 10 |
| (REPEAT) | 1 X 1(999) X 5(999) |
| HOLD | HOLD (가) HOLD (가) |
| WAIT (,) | 1) Rear Wait ± WAIT , 가 0 (± WAIT) 가 2) Front Wait ± WAIT , 가 : ±0 9.9 / 0 99 %RH |
| ADVANCE | ADVANCE STEP 0 STEP) Wait Advance 1) Rear Wait 2) Front Wait 0 (SP)= . |
| PROGRAM RUN | 1) RUN 2) : RUN/STOP, ON / 1 3) : , , 가 1) RUN ON . 2) 1) 2) RUN |
| STOP | 1) STOP 2) STOP RUN/STOP ON / 1 () STOP OFF 가 . |

| | | | |
|-------------|--------------|-----------------------|-----------|
| PID ZONE | PID | 6 ZONE 가 (PID 가) | SP |
| RUN | 1) 3 X 2 = 6 | ON/OFF X 1 "ON" | END "OFF" |
| END | END | ON/OFF X 1 "ON" | RUN "OFF" |
| TIME SIGNAL | ON/OFF | ON/OFF X 4 10 가 | |
| | (| (, ,STOP) OFF 가 . | OFF) |

4.5 (INNER SIGNAL)

| | |
|----|---|
| | ON/OFF X 6 (MAX DC30V MAX50mA/1ch 47) |
| | (TEMP) / (HUMI) |
| | (SP) / (PV) / (DV) |
| | (ABS) / (DEV) |
| | ZONE ON/OFF / (LOW/HIGH) |
| | -100.0 200.0 0 100.0 %RH |
| | -99.9 +99.9 -99.9 +99.9 %RH |
| | ±0.0 ±9.9 ±0.0 ±9.9 %RH |
| ON | 0 99 |

| | | |
|--|-----------|--|
| | | |
| | TEMP/HUMI | INNER SIGNAL |
| | PV/SP/DV | ON/OFF 가 PV: , SP: DV: () |
| | LOW/HIGH | (ABS) (DEV) |
| | ON/OFF | SP DV ZONE (ON/OFF) ZONE : 2 MIN MAX -100.0 200.0 2 MIN MAX 0.0 100.0%RH ON/OFF : ON ZONE ON ON ZONE OFF OFF ZONE ON OFF ZONE OFF |

4.6

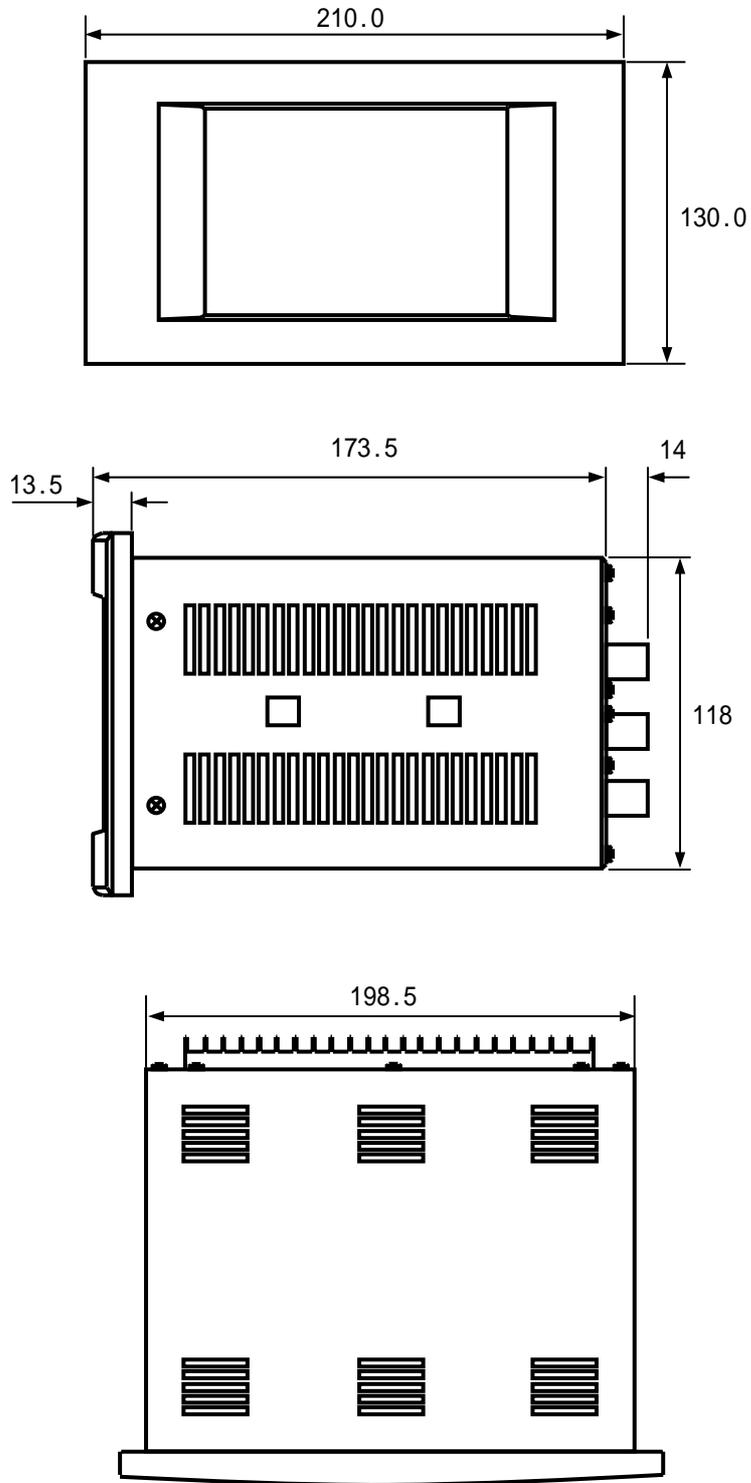
| | | |
|--|-------------|----------------------------|
| | | |
| | | 1) |
| | | 2) |
| | | 가 |
| | | -100.0 200.0 |
| | | 0 100%RH(0.0 99.9 가) |
| | | 0 9.9 /min, 0 9.9 %RH/min, |
| | AUTO TUNING | PID |
| | | -100.0 200.0 |
| | | 0 100%RH(0.0 99.9 가) |

4.7

| | |
|----------------|-------------------------------------|
| | |
| | + (/) |
| | -100 200, -50 150, 0 200, -80 120 가 |
| | 0 100%RH |
| | 4, 12, 24, 48, 96 , 8 가 |
| | PV , SP , 가 () |
| , , | , , 가 (2000 가) |
| | 0 100 가 0 100%RH 가 |
| | 0.0%RH : OFF : "____. _" OFF |
| LCD brightness | LCD 가 |
| (TOTAL TIME) | RUN () 9,999 59 , END 0 |
| | ON/TIMER OFF 가 (0 99min) OFF ON |
| (RUN LOCK) | RUN/STOP |
| | 10 가 |

4.9

: mm



Honeywell

S&C

2 가 191

6

: (02) 799 - 6175~6

A / S : (02) 799 - 6121~5

2001 02