

NV Series

Features

- Monitors gas leakage even during a power failure or other lifeline failures. (on models with a built-in backup power supply) Continuously monitors for 30 minutes after a power failure, then intermittently monitors for 2 days. The interval between observations depends on the number of detection points. (NV-500)
Continuously monitors for 30 minutes after a power failure. (NV-400/410/600HS/010)
- Operated normally in a seismic qualification test equal to intensity of 7 on the Japanese earthquake scale. Earthquake-resistant design considering great earthquakes. A plastic molded case which contains the electronic circuit is hard to break and has substantially improved insulation. The case structure has been refined to increase the strength.
- Gas concentration at the time of an alarm is shown at a glance.
NV-410 has a scale of 0 to 10. (No unit)
- Battery life can be measured by one-touch operation. (Battery life check function)
- Very easy to change the alarm set value. (▲▼ key)
- NV-500/010 has extremely easy zero adjustment and span adjustment. (One-touch calibration function)
- Wide operating voltage range of 85-264V.
- NV-500/010 comes with Zero suppression function.



▲ Indicator unit



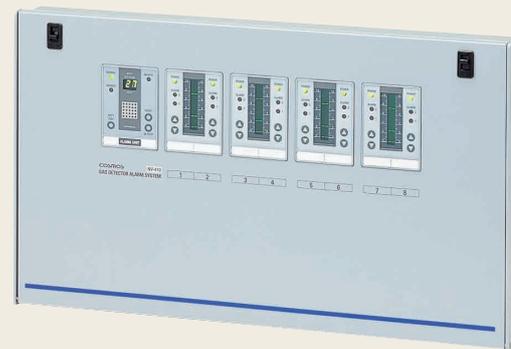
▲ Alarm unit

System Configuration

Indicator/Alarm Unit



LP gas detection & alarm system NV-500



Town gas, Industrial gases detection & alarm system NV-400 NV-410



For hydrogen filling stations NV-600HS



For Ammonia refrigerating facilities NV-010

Gas Detector Heads

■ Diffusion type



KD-5B-N

■ Diffusion type



KD-5

■ Suction type



PE-2DC

■ Diffusion type



KD-7

Accessories/Options

■ Options (sold separately)



KW-22
Rainproof cap



KW-15
Rainproof cover



EB-5
External buzzer

■ Options (sold separately)



PW-51/KW-11,12
Rainproof cover



EB-5
External buzzer

■ Options (sold separately)



KW-71
Rainproof cover for KD-7



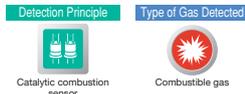
EB-5
External buzzer

Multi-Point Type

Gas Detection & Alarm System

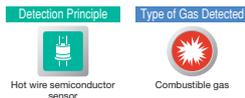
NV Series

LP Gas Detection & Alarm System NV-500 Specifications



Item	Model	NV-500
Detection Principle		Catalytic combustion
Gas Detected		LPG
Detection Points per Unit		Monitors 2 points per unit
Detection Range		0-100%LEL (isobutane)
Concentration Indicator		LCD bar-graph meter (53 dots×2 lines)
Alarm Set Value Indication		Direct reading scale
Backlight		Yes
Peak Hold Function (on alarm)		Holds a peak value on alarm, which is canceled by the Reset
Alarm Set Value(default value)/Change of the Set Value		24 or 16%LEL/ Δ / ∇ key
Alarm Accuracy		\pm 25% of an Alarm Set Value (under identical conditions)
Response Time		30s or less at 160% concentration of an Alarm Set Value (excluding sampling delay for suction type)
Alarm Indication	Individual Alarm Lamp Self-holding type	On alarm: Flashes red, lights up after the Buzzer Stop Complete lock (Turn off by the Reset after the level declined)
Alarm Sound	Standard Operation Voice Alarm	On alarm: Intermittent buzzer, stops after the Buzzer Stop On alarm: Intermittent buzzer
External Alarm Output	Individual Alarm Contact	1a no-voltage (Contact capacity: 2A@100V AC)
	Individual Voltage Output	0-6-12V DC (20mA or less)
	Collective Alarm Contact	1c no-voltage (Contact capacity: 2A@100V AC)
	Centralized Monitor Panel Output	0-6-12V DC (20mA or less)
	External Buzzer Contact	1a no-voltage (Contact capacity: 2A@100V AC)
External Buzzer Voltage Output		Intermittent voltage signal (12V DC, 10mA or less)
Alarm Delay		Selectable by a DIP switch (10s constant)
Main Power Source		85-264V AC
Power	When using KD-5	Diffusion type (15+3.5n)VA
Consumption	When using PE-2DC	Suction type (15+7.5n)VA
Backup Power Source (only on models with a built-in backup power supply)	Battery Type	Sealed lead acid battery
	Overdischarge Prevention Function	Yes
	Battery Life Check Function	Yes
	Battery Voltage Indication	2-digit LED
Exterior Color		Munsell 2.5PB 7.0/1.0

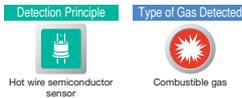
Town gas, Industrial gases Detection & Alarm System NV-400/NV-410 Specifications



Item	Model	NV-400/NV-410 *1
Detection Principle		Hot wire semiconductor
Gas Detected		NV-400:Town gas (Natural gas) NV-410:Town gas or Industrial gases
Detection Points per Unit		Monitors 2 points per unit
Detection Range		NV-400: 0-100%LEL NV-410: As per specifications
Concentration Indicator		LCD bar-graph meter (53 dots×2 lines)
Alarm Set Value Indication		Direct reading scale(except NV-410)
Backlight		Yes
Peak Hold Function (on alarm)		Holds a peak value on alarm, which is canceled by the Reset
Alarm Set Value (default value)		NV-400: 10%LEL for 1st stage, 24%LEL for 2nd stage NV-410: As per specifications
Alarm Accuracy		\pm 25% of an Alarm Set Value (under identical conditions)
Response Time		NV-400/410: 30s or less at 160% concentration of an Alarm Set Value (excluding sampling delay for suction type)
Alarm Indication	Individual Alarm Lamp Self-holding type	On alarm: Flashes red, lights up after the Buzzer Stop Complete lock (Turn off by the Reset after the level declined)
Alarm Sound		On alarm: Intermittent buzzer, stops after the Buzzer Stop
External Alarm Output	Individual Alarm Contact	1a no-voltage (Contact capacity: 2A@100V AC)
	Individual Voltage Output	0-6-12V DC (20mA or less)
	Collective Alarm Contact	1c no-voltage (Contact capacity: 2A@100V AC)
	Centralized Monitor Panel Output	0-6-12V DC (20mA or less)
	External Buzzer Contact	1a no-voltage (Contact capacity: 2A@100V AC)
External Buzzer Voltage Output		Intermittent voltage signal (12V DC, 10mA or less)
Alarm Delay		Selectable by a DIP switch (10s constant)
Main Power Source		85-264V AC
Power	When using KD-5	Diffusion type (15+3.5n)VA
Consumption	When using PE-2DC	Suction type (15+8n)VA
Backup Power Source (only on models with a built-in backup power supply)	Battery Type	Sealed lead acid battery
	Overdischarge Prevention Function	Yes
	Battery Life Check Function	Yes
	Battery Voltage Indication	2-digit LED
Exterior Color		Munsell 2.5PB 7.0/1.0

* 1 Also usable for other gases.

For Hydrogen filling stations NV600HS Specifications



Item	Model	NV-600HS
Detection Principle		Hot wire semiconductor
Gas Detected		Hydrogen and other combustible gases
Detection Points per Unit		Monitors 2 points per unit
Detection Range		As per specifications
Concentration Indicator		LCD bar-graph meter (53 dots×2 lines)
Alarm Set Value Indication		Direct reading scale
Backlight		Yes
Peak Hold Function (on alarm)		Holds a peak value on alarm, which is canceled by the Reset
Alarm Set Value		Adjustable with the detection range
Alarm Accuracy		±25% of an Alarm Set Value (under identical conditions)
Response Time		30s or less at 160% concentration of an Alarm Set Value (excluding sampling delay for suction type)
Alarm Indication	Individual Alarm Lamp Self-holding type	On alarm: Flashes red, lights up after the Buzzer Stop Complete lock (Turn off by the Reset after the level declined)
Alarm Sound		On alarm: Intermittent buzzer, stops after the Buzzer Stop
External Alarm Output	Individual Alarm Contact	1a no-voltage (Contact capacity: 2A@100V AC)
	Individual Voltage Output	0-6-12V DC (20mA or less)
	Collective Alarm Contact	1c no-voltage (Contact capacity: 2A@100V AC)
	Centralized Monitor Panel Output	0-6-12V DC (20mA or less)
External Buzzer Voltage Output	External Buzzer Contact	1a no-voltage (Contact capacity: 2A@100V AC)
	External Buzzer Voltage Output	Intermittent voltage signal (12V DC, 10mA or less)
Alarm Delay		Selectable by a DIP switch (10s constant)
Main Power Source		85-264V AC
Power	When using KD-5	Diffusion type (15+3.5n)VA
Consumption	When using PE-2DC	Suction type (15+8n)VA
Backup Power Source (only on models with a built-in backup power supply)	Battery Type	Sealed lead acid battery
	Overdischarge Prevention Function	Yes
	Battery Life Check Function	Yes
	Battery Voltage Indication	2-digit LED
Exterior Color		Munsell 2.5PB 7.0/1.0

For Ammonia Refrigerating Facilities NV-010



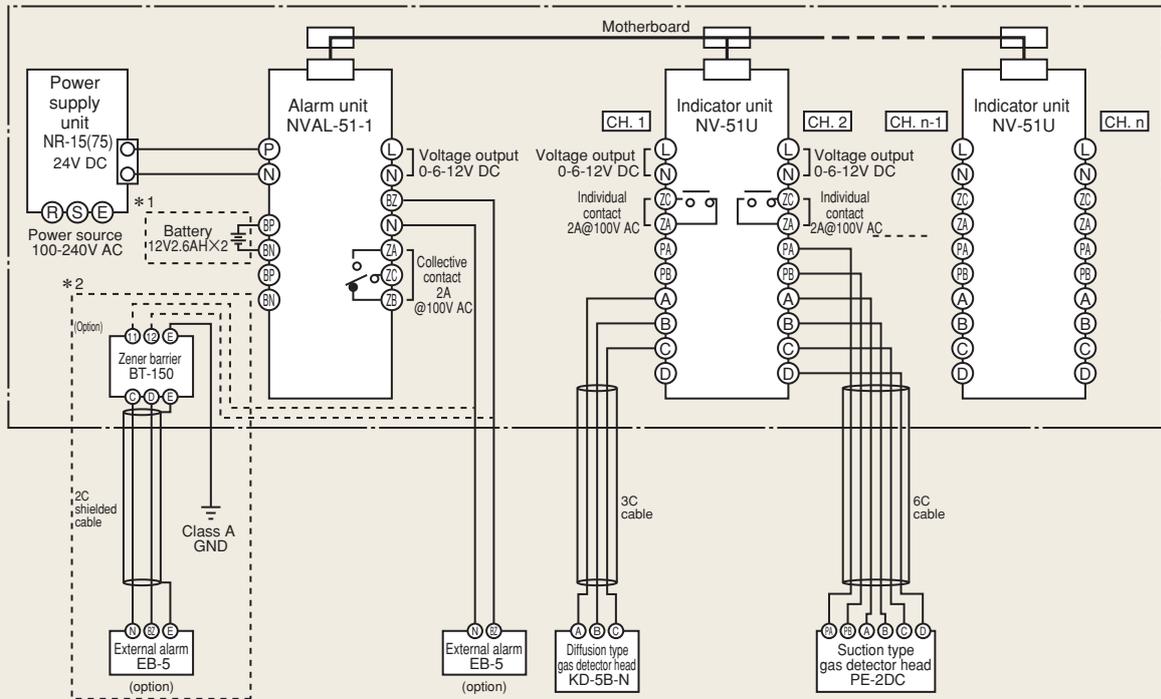
Item	Model	NV-010
Detection Principle		Hot wire semiconductor
Gas Detected		Ammonia leaked into the air
Detection Points per Unit		Monitors 2 points per unit
Detection Range		0-400ppm
Concentration Indicator		LCD bar-graph meter (53 dots×2 lines)
Alarm Set Value Indication		Direct reading scale
Backlight		Yes
Peak Hold Function (on alarm)		Holds a peak value on alarm, which is canceled by a reset operation
Alarm Set Value(default value)		50 or 100ppm/ △▽ key
Change of the Set Value		
Alarm Accuracy		±30% of an Alarm Set Value (under identical conditions)
Response Time		60s or less at 160% concentration of an Alarm Set Value
Alarm Indication	Individual Alarm Lamp Self-holding type	On alarm: Flashes red, lights up after the Buzzer Stop Complete lock (Turn off by the Reset after the level declined)
Alarm Sound		On alarm: Intermittent buzzer, stops after the Buzzer Stop
External Alarm Output	Individual Alarm Contact	1a no-voltage (Contact capacity: 2A@100V AC)
	Individual Voltage Output	0-6-12V DC (20mA or less)
	Collective Alarm Contact	1c no-voltage (Contact capacity: 2A@100V AC)
	Centralized Monitor Panel Output	0-6-12V DC (20mA or less)
External Buzzer Voltage Output	External Buzzer Contact	1a no-voltage (Contact capacity: 2A@100V AC)
	External Buzzer Voltage Output	Intermittent voltage signal (12V DC, 10mA or less)
Alarm Delay		Selectable by a DIP switch (10s constant)
Main Power Source		85-264V AC
Power Consumption		(15+3.5n)VA
Backup Power Source (only on models with a built-in backup power supply)	Battery Type	Sealed lead acid battery
	Overdischarge Prevention Function	Yes
	Battery Life Check Function	Yes
	Battery Voltage Indication	2-digit LED
Exterior Color		Munsell 2.5PB 7.0/1.0

Multi-Point Type

Gas Detection & Alarm System

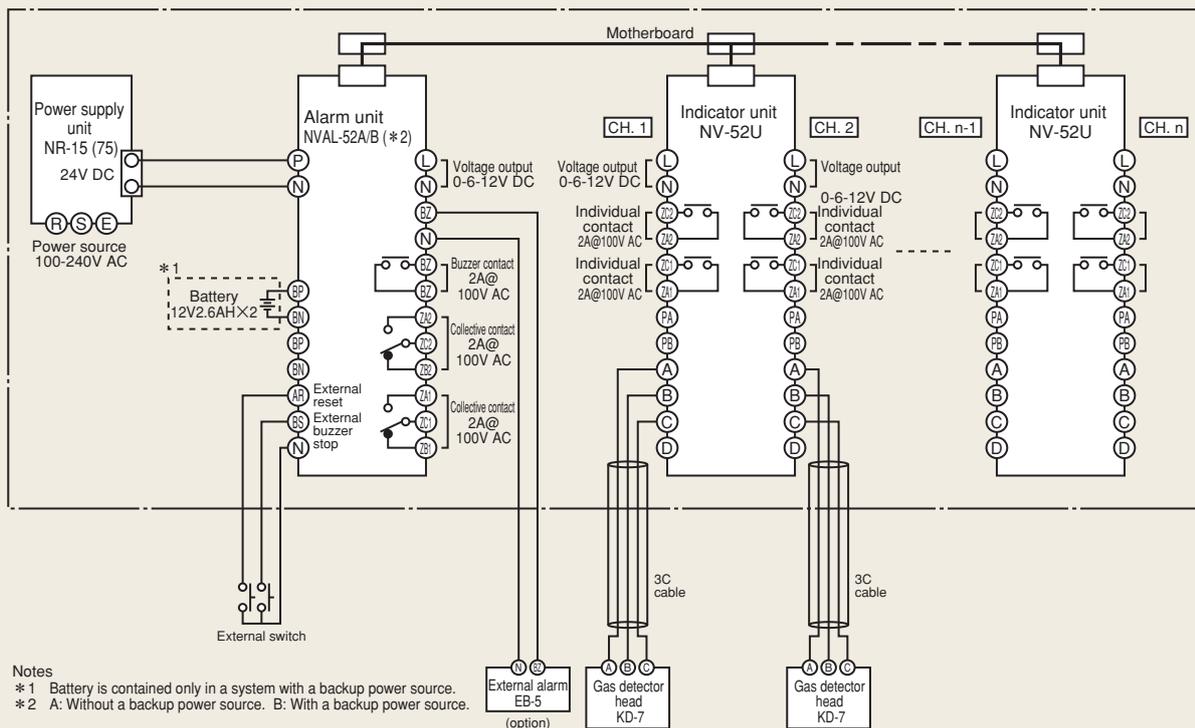
NV Series

V-500/NV-400/NV-410/NV-010 Terminal Arrangements



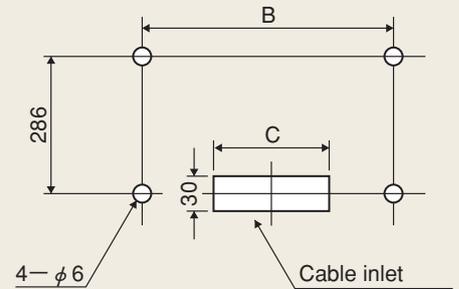
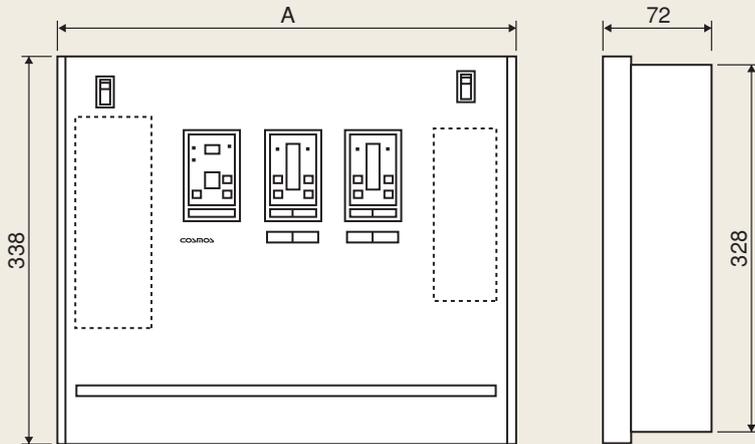
Notes
 *1 Battery is contained only in a system with a backup power source.
 *2 For intrinsically safe explosion-proof work.

NV-010 Terminal Arrangements

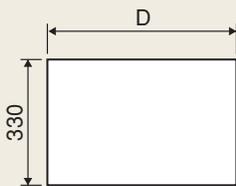


Notes
 *1 Battery is contained only in a system with a backup power source.
 *2 A: Without a backup power source. B: With a backup power source.

NV Series Dimensions



Mounting hole dimensions for wall mounting



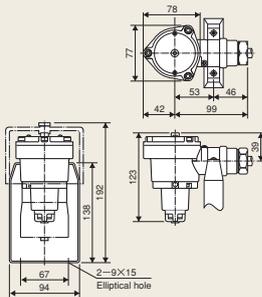
Panel cutout dimensions for panel mounting

Dimensions table

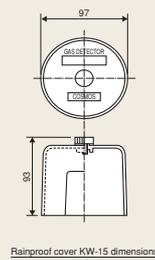
(Unit : mm)

Number of points	A	B	C	D	Remarks
2-point	220	152	100	214	Without a backup power source
2-point	298	230	100	292	With a backup power source
4-point	421	343	240	415	With or without a backup power source (common dimensions)
6-point	495	417	240	489	
8-point	569	491	240	563	
10-point	643	565	360	637	
12-point	717	639	360	711	

KD-5 Dimensions

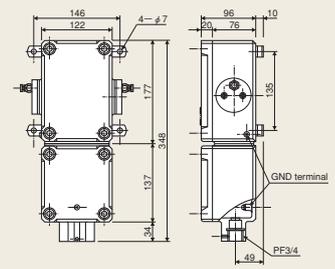


KW-15 Dimensions

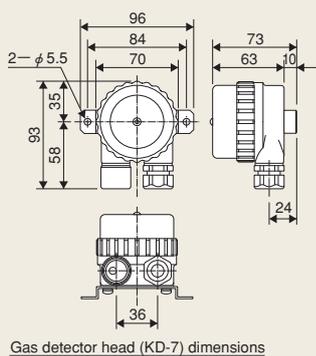


Rainproof cover KW-15 dimensions (option)

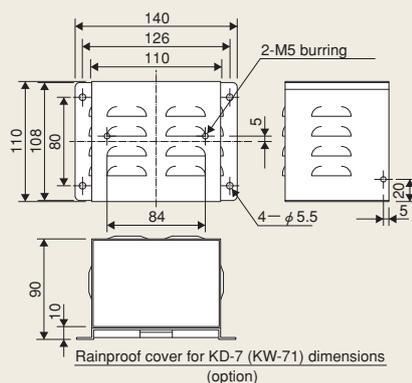
PE-2DC Dimensions



KD-7/KW-71 Dimensions



Gas detector head (KD-7) dimensions



Rainproof cover for KD-7 (KW-71) dimensions (option)

EB-5 Dimensions

