NITTAN

CONVENTIONAL FIRE ALARM CONTROL PANEL 2PD2-5L

2PD2-5L

■ Features

- Alarm delay function
  - Heat Detector   : 20 sec.
  - Smoke Detector : 60 sec.

- Alarm delay ON/OFF switch function

- Supervision of circuit voltage and detector line open-circuit conditions

- Energy saving technology for saving running costs

- Extra compact and slim design

- Light body using flame retardant ACS resin

- High reliability minimizes maintenance costs

- Equipped with surge absorbers

- 1 output for zone alarm bells

- 1 output for common fire alarm signal transfer to an external facility

- 5 open-collector outputs for indications of a remote annunciator

- Easy wiring by Push-in terminals' one-touch connection

■ Description

The 2PD2-5L is a conventional fire alarm panel with a stylish wall-mount design supplied in 5 zone format. All detector circuits will be indicated with lighting red LEDs in alarm conditions and flashing in open-circuit fault conditions. The panel has an alarm delay function on detector circuits to reduce false alarms, including a delay ON/OFF function.

The 2PD2-5L utilizes the latest technology to achieve a compact, sophisticated and highly reliable product. This panel is suitable for a wide range of environmental risks in industrial and commercial applications. E.g. Shops, offices, warehouses, guest houses, post-offices, mobile phone stations, etc.

The 2PD2-5L is equipped with surge absorbers on the primary side of the transformer to protect its circuit from the lightning and electrical surge.

■ Remote Test Function

Remote test function is available for PK2B-DP-006 and PK2B-P-021 detectors by using a dedicated remote tester, MTT-E.

PK2B-DP-006

- Distinguishes vapor and smoke
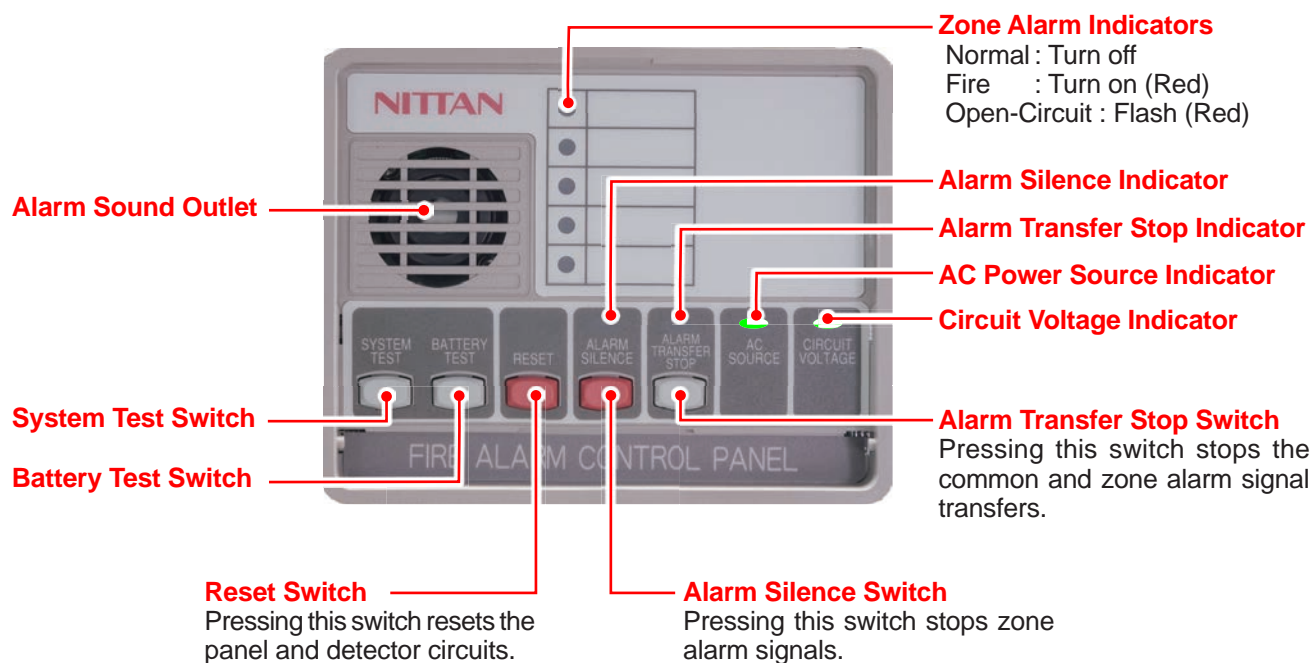- Automatic sensitivity compensation

PK2B-P-021

- Remote-test available
- Automatic sensitivity compensation
- Suitable for Condominiums

MTT-E

- Remote tester
- Smoke sensitivity test
- Dirty device test
- Remote activation test

■ Indicators and switches on the operation panel

Alarm Sound Outlet

System Test Switch

Battery Test Switch

Zone Alarm Indicators
Normal : Turn off
Fire   : Turn on (Red)
Open-Circuit : Flash (Red)

Alarm Silence Indicator

Alarm Transfer Stop Indicator

AC Power Source Indicator

Circuit Voltage Indicator

Alarm Transfer Stop Switch
Pressing this switch stops the common and zone alarm signal transfers.

Reset Switch
Pressing this switch resets the panel and detector circuits.

Alarm Silence Switch
Pressing this switch stops zone alarm signals.
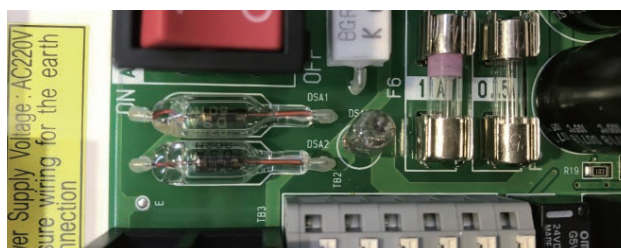
■ Functions

Alarm Delay ON/OFF switch
This switch enables/disables the alarm delay function. In alarm delay mode, an alarm signal from a detector will be verified for a real alarm to avoid false alarms.
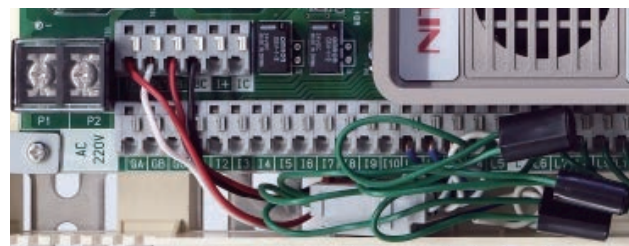

Surge absobers
Lightning surge protection devices are equipped as standard to the primary side of the transformer to protect semiconductor components.

Push-in type terminals
Push-in type terminals are provided for easy connection of field wiring and servicing. AWG14 to 22 conductors are connectable to the terminals.
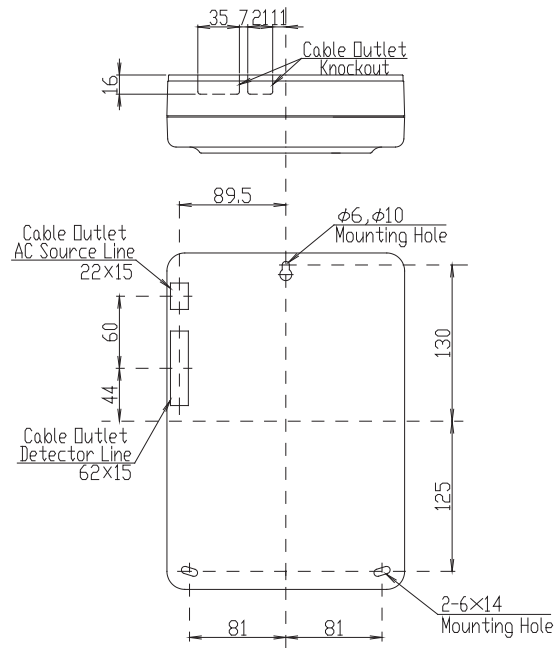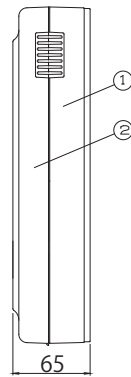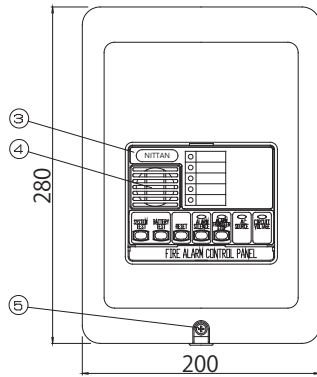

System Test/ Battery Test switches
Pressing System Test switch activates all zones for test without bell sounding. Battery Test switch provides a voltage check for the standby battery.
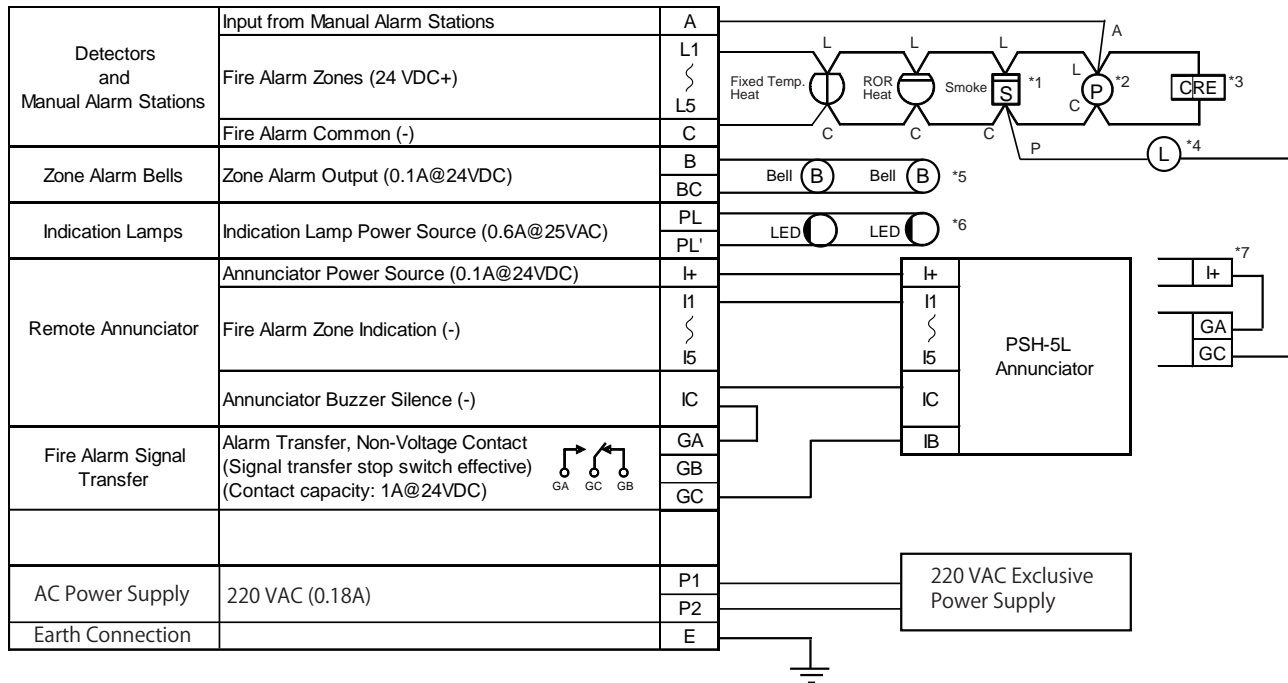
■ Dimensions

① Body
② Cover
③ Operation Panel
④ Alarm Sound Outlet
⑤ Screw

Front Side View

■ Typical Wiring Diagram

2PD2-5L Fire Alarm Control Panel

Detectors and Manual Alarm Stations	Input from Manual Alarm Stations	A	
	Fire Alarm Zones (24 VDC+)	L1 ⌇ L5	
	Fire Alarm Common (-)	C	
Zone Alarm Bells	Zone Alarm Output (0.1A@24VDC)	B / BC	
Indication Lamps	Indication Lamp Power Source (0.6A@25VAC)	PL / PL'	
Remote Annunciator	Annunciator Power Source (0.1A@24VDC)	I+	
	Fire Alarm Zone Indication (-)	I1 ⌇ I5	
	Annunciator Buzzer Silence (-)	IC	
Fire Alarm Signal Transfer	Alarm Transfer, Non-Voltage Contact (Signal transfer stop switch effective) (Contact capacity: 1A@24VDC)	GA / GB / GC	
AC Power Supply	220 VAC (0.18A)	P1 / P2	
Earth Connection		E	

*1: Max. number of smoke detectors is 20 pcs. per zone.

*2: P = Manual Alarm Station

*3: The CRE is a dedicated end-of-line device which comes with the 2PD2-5L fire alarm control panel.

*4: L = Remote Indication Lamp. Use I+ and GA, GC' terminals when use remote indication lamps.

*5: Max. number of bells is 10 pcs. when using motor bells rated at 10mA, 24VDC.

*6: Max. number of indication lamps is 60 pcs. when using indication lamps rated at 9mA, 24VDC/AC.

*7: When using the PSH-5L remote annunciator, this wiring is not available.

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■ Specifications

Specifications	2PD2-5L
AC Power	220VAC ±10% 50/60 Hz
Standby Battery	24VDC / 0.45 Ah, Sealed Type Ni-Cd battery
Nominal Delay Time	60 sec. (For smoke detector: 60 sec. For heat detector: 20 sec.)
Dimensions	W200 x H280 x D65 mm
LED Indicators	Zone alarm, Detector line open-circuit, AC source, Circuit voltage, Alarm silence, Alarm transfer stop
Functions	Circuit voltage monitoring, Open-circuit monitoring
External Line Resistance	50 Ω and less
End of Line Device	CRE
Panel Alarm Sounder	Piezoelectric buzzer
Fire Alarm Signal Transfer	GA, GB, GC (Form-C) Contact Capacity: 1A 24VDC
Zone Alarm Signal Transfer	I1 — I5 (Open collectors) 0.05A per circuit
Output for Zone Alarm Bells	0.1A @ 24VDC (B, BC)
Output for Indication Lamps	0.6A @ 25VAC (PL, PL')
Output for External Power Supply	0.1A @ 24VDC (I+, IC)
Number of Connectable Detectors	Standard type Smoke (2KH series): Max. 20 per zone Heat (2SC series): As required
Compatible Manual Alarm Station	2ME1A
Compatible Annunciator Panel	PSH-5L x 1 unit
Operating Environment	0°C to +40°C, non-condensation
Terminals	Push-In type, AWG14 to 22
Primary Materials	Flame retardant ACS resin
Body Color	Semi-gloss (off-white)