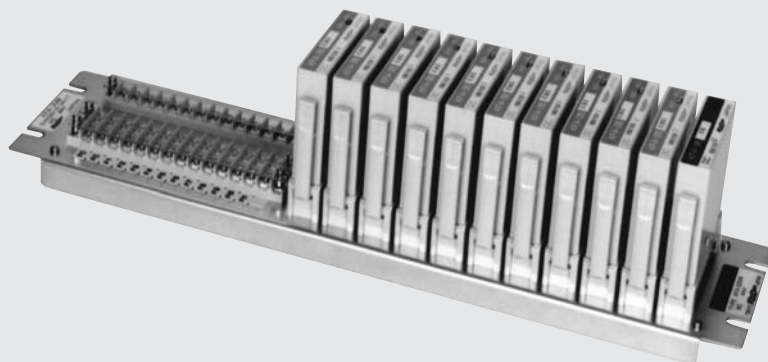


# Reflash Annunciator

## KFA-330D/KFA-330G



### ■ Features

- KFA-330D/KFA-330G annunciator receives output from the KFA-333 Reflash Unit and issues an alarm for successively occurring faults.
- With conventional annunciators, after the buzzer stops, an alarm will not be issued even if there is a second fault. With the KFA-330D/330G annunciators, the first fault and all subsequent faults are processed in the same manner. In other words, because these annunciators can process multiple input faults, they are perfect for large-scale concentrated monitoring.



#### NOTICE

- Be sure to turn off the power when mounting or dismounting alarm or common unit.
- Use twist pair wires when wiring fault input contacts and operation switches.
- Keep unnecessary switches open.
- For lamp test switches, select a type to which operating voltages are impressed and which covers all currents of indicator lights.

## ■ Product Configuration

KFA-330D and KFA-330G annunciators are comprised of a chassis unit (KFA-34D/G), alarm unit (KFA-35C D5R or KFA-35CG), and common unit (KFA-36D). 10 alarm units and 1 common unit can be mounted on a chassis unit. The chassis includes terminal blocks for fault input/visible output and operation input. One common unit (KFA-36□□) can drive up to 100 alarm units.

## ■ Model Designation

### KFA330D type

#### Chassis Unit

**KFA - 34D**

Model name

### KFA330G type

#### Chassis Unit

**KFA - 34G**

Model name

#### Alarm Unit

**KFA - 35**

**C**

□

**D5R**

□

□

**B** is entered for b contacts input only.  
**M** is entered only when reset memory is provided.

Sequence No.

Operating voltage

6: 24V DC  
7: 48V DC  
8: 100/110V DC  
9: 125V DC

Without first-out function

Basic type

#### Alarm Unit

**KFA - 35**

**C**

□

**G**

Sequence No.

Operating voltage

6: 24V DC  
7: 48V DC  
8: 100/110V DC  
9: 125V DC

Without first-out function

Basic type

#### Common Unit

**KFA - 36D**

□

Operating voltage

6: 24V DC  
7: 48V DC  
8: 100/110V DC  
9: 125V DC

Model name

#### Common Unit

**KFA - 36D**

□

Operating voltage

6: 24V DC  
7: 48V DC  
8: 100/110V DC  
9: 125V DC

Model name

#### Dummy Unit

**KFA - 35D**

Model name

#### Dummy Unit

**KFA - 35D**

Model name

## ■ Specifications

### KFA-330D, KFA-330G System

Operating voltage	DC	24V	48V	100V/110V	125V
	Allowable range	±10% of rated voltage			
Operation environment		Temperature: -10~+60°C, Humidity: 45~85%RH (No freezing or condensation)			
Storage temperature		-20~+70°C, (No freezing or condensation)			
Vibration resistance		JIS C0911			
Shock resistance		JIS C0912 (10G, XYZ axis, 3 times each)			
Noise resistance	Impulse	Pulse duration 1μs, 150ns, 1800V, 80Hz			

### Chassis Unit KFA-34D, KFA-34G

Insulation Resistance	50MΩ or more between live parts and ground by 500V DC megohmmeter
Withstand Voltage	2000V AC for 1 minute between live parts and ground

### Alarm Unit KFA-35C□D, KFA-35C□G

Item	Model	KFA-35C 6□	KFA-35C 7□	KFA-35C 8□	KFA-35C 9□
Power consumption (except for indicator light)		0.3W max.	0.6W max.	0.9W max.	1.1W max.
Fault input	Contact	N.O. contact (solid state input is available)			
	Voltage	24V	48V	100/110V	125V
	Resistance	8KΩ	19KΩ	60KΩ	65KΩ
	Response time	5msec			
Operating input	Field contact	N.O.			
	Contact voltage	9.5 ±1V			
	Input resistance	20KΩ ±10%			
	FT	Shows the same function as the alarm input (fault input)			
	Time	50msec			
Fault Output	Voltage	24V	48V	100/110V	125V
	Current	250mA max.			
Audible		BZ/BL selectable			

### Common Unit KFA-36D

Model	KFA-36 D6	KFA-36 D7	KFA-36 D8	KFA-36 D9
Power Consumption (excluding audible output)	0.2W max.	0.5W max.	0.9W max.	1.1W max.
Audible Output	250mA (open collector) Buzzer and Bell			
Lamp Flicker Cycle	0.7 sec ±10%			
Number of Alarm Units	100 units max.			

## ■ Materials

Terminal Block	P.B.T. resin	(black)
Terminal Screw	Carbon steel	(nickel plated) M3×6
Terminal Block Cover	Polycarbonate resin	
Printed Circuit Board	Glass epoxy resin	thickness 1.6mm
Alarm/Common Unit Case	Polycarbonate resin	(black)
Chassis	Steel sheet	

## ■ Weight

Chassis unit	: 1,600g
Alarm unit	: 100g
Common unit	: 90g
Dummy unit	: 48g

## ■ Sequence Pattern

### KFA-330D

Model name	Operation input/output	BS	ACT (ACK)	RST	BS	BS	ACT (ACK)	RST	BS	ACT (ACK)	BS	ACT (ACK)	RST	FT	BS	ACT (ACK)	RST
KFA-35C□D5R	Fault input	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
	Visible output	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
	Audible output	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑

### KFA-330G

Model name	Operation input/output	BS	ACT (ACK)	BS	BS	ACT (ACK)	BS	ACT (ACK)	BS	ACT (ACK)	BS	ACT (ACK)	FT	BS	ACT (ACK)
KFA-35C□G	Fault input	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
	Visible output	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
	Audible output	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑

## ■ Input/Output Terminal Nos. of Alarm Units and Common Units

Terminal No.	Symbol	Function
1	L	An alarm lamp output terminal The terminal drives indicator lamps by open collector output
3	P	P (+) pole for rated operating voltage
5	BL	Bell output terminal The terminal drives audible output by open collector
7	n	N (–) pole for rated lamp voltage
9	FA	A flashing signal terminal This is an input from the common unit to the alarm unit and makes the alarm lamp flashing
11	FT	A function test (operation test) terminal This connects the switch for confirming the sequence operation
13	BZ	Buzzer output terminal The terminal drives audible output by open collector
15	BLC	Bell control terminal At fault input, bell signal is input from the alarm unit to the common unit
17	BZC	Buzzer control terminal At fault input, buzzer signal is input from the alarm unit to the common unit
19	RST	Reset terminal for alarm lamp This connects the reset switch for alarm lamp
21	ACT	This connects the switch for stopping flicker
23	BS	Buzzer and bell stop terminal This connects the switch for audible silence
25	N	N (–) pole for rated operating voltage All current returns to the N (–) pole of the power supply through this terminal
27	F	Fault input terminal The fault contact shall be connected between this terminal and N (–) pole of the rated operating voltage

### Notes:

1. N.O. contact switches shall be used for the switches connected to the above mentioned terminals 11, 19, 21 and 23. Voltage of approx. 10V shall be applied to these contacts and the input impedance shall be approx. 20KΩ. Connection shall be made between the N (–) pole of the rated operating voltage and an each terminal of the switch.

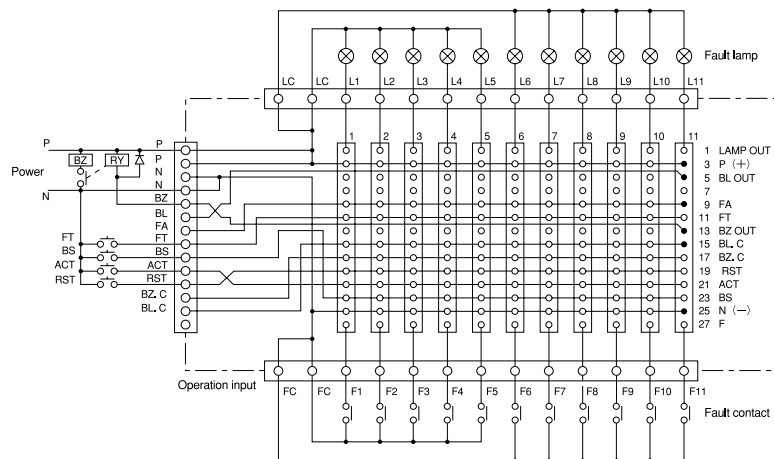
## ■ Chassis Unit Input/Output Terminal Nos.

Refer to the chassis unit connection diagram.

Symbol	Function
LC	Alarm lamp power supply terminal P (+)
L1~L11	Output terminal of the lamp on each alarm unit This is connected to the collector of the output transistors on the alarm unit When the alarm lamp lights, this terminal voltage becomes approx. 0V
FC	Fault input common terminal N (–)
F1~F11	Fault input terminal The fault contact shall be connected to this terminal and the N (–) pole of FC When the fault contact is opened, the operating voltage is applied
p	P (+) pole for rated lamp voltage

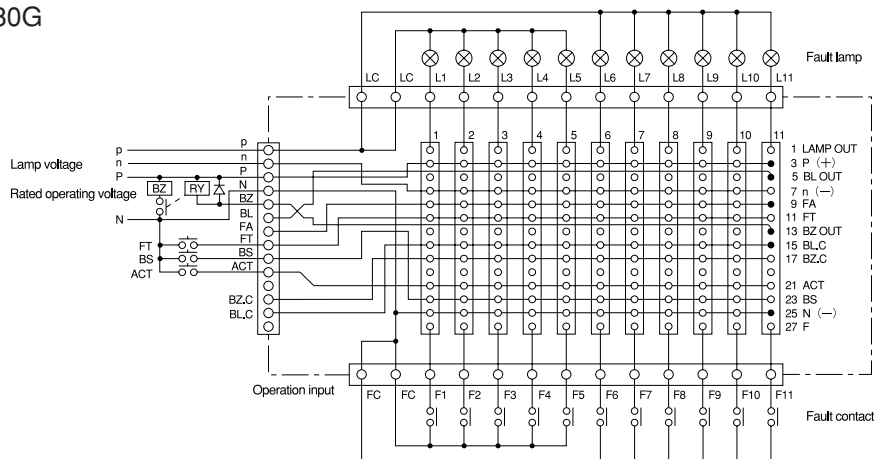
## ■ Chassis Unit Connection Diagram

### ▼ KFA-330D



- The connections inside the chassis unit are indicated by (— — — —).
- Other operation switches, buzzers, relays, lamps, etc., are not included in this unit.

### ▼ KFA-330G

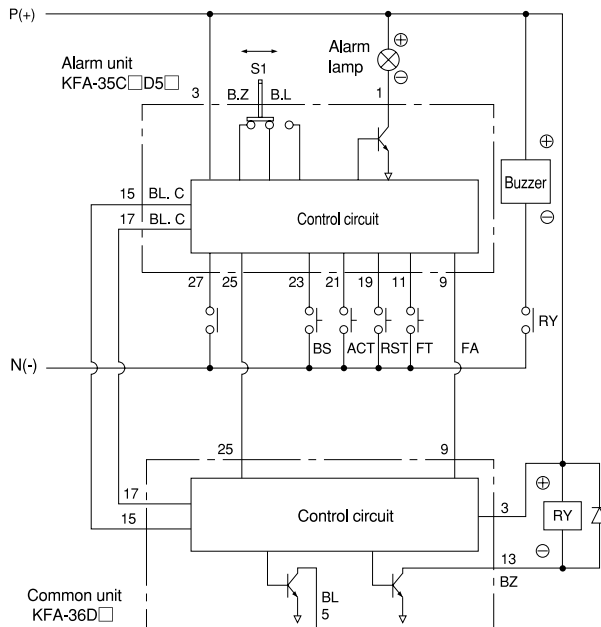


- The KFA-330G annunciator uses separate power sources for the rated operating voltage and for the lamp voltage.
- The connections inside the chassis unit are indicated by (— — — —).
- Other operation switches, buzzers, relays, lamps, etc., are not included in this unit.

## System Connection Diagram

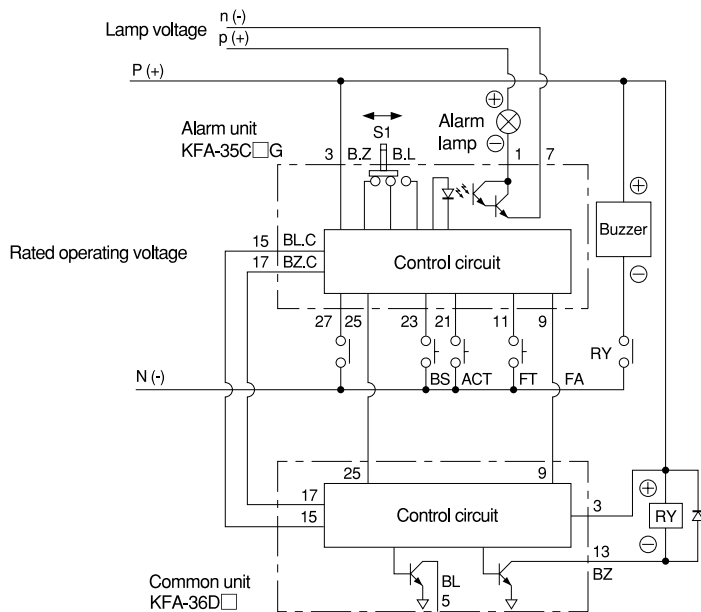
The diagram shows the basic connection of the alarm unit (KFA-35C D5R) and the common unit (KFA-36D□).

### ▼ KFA-330D



- The input or output terminal number on each unit shows the pin number of the connectors.
- S1 switches are used to select either BZ output or BL output. P (+) and N (–) show the polarity of the rated operating voltage. P (+) and N (–) show the polarity of the lamp voltage.
- RY shows relay and makes the buzzer sound through this contact.

### ▼ KFA-330G



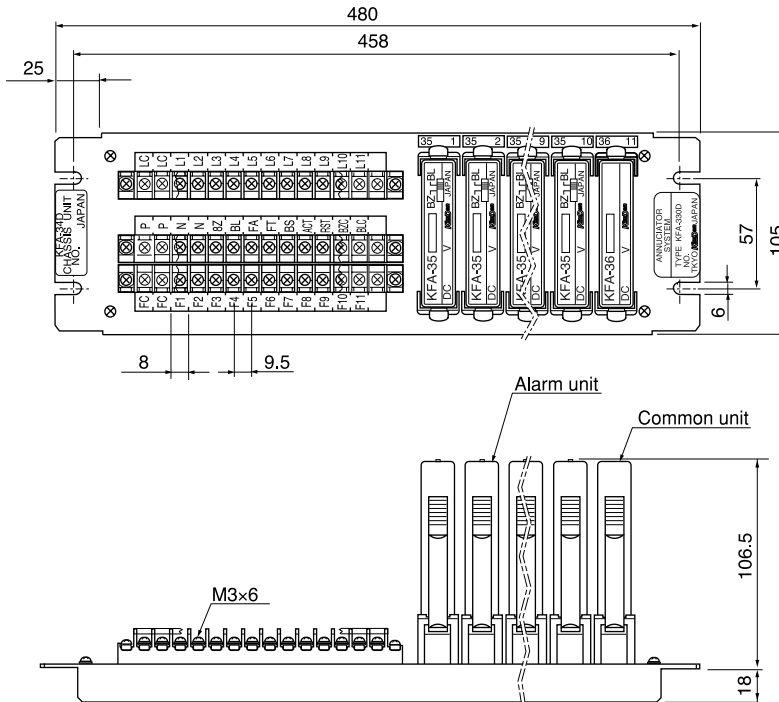
- The input or output terminal number on each unit shows the pin number of the connectors.
- S1 switches are used to select either BZ output or BL output. P (+) and N (–) show the polarity of the rated operating voltage. P (+) and N (–) show the polarity of the lamp voltage.
- RY shows relay and makes the buzzer sound through this contact.

- The KFA-330G annunciator uses separate power sources for the rated operating voltage and for the lamp voltage.

## ■ Dimensions

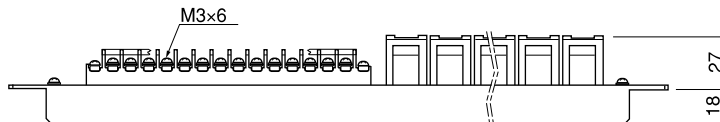
This drawing shows the system for 10 points. KFA-330D and KFA-330G complete with alarm unit, common unit and chassis unit.

### ▼ KFA-330D, KFA-330G

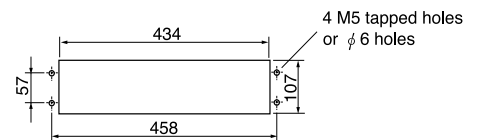


**Note:** The outer dimensions of KFA-330D and KFA-330G are the same, however, the terminal numbers are different.

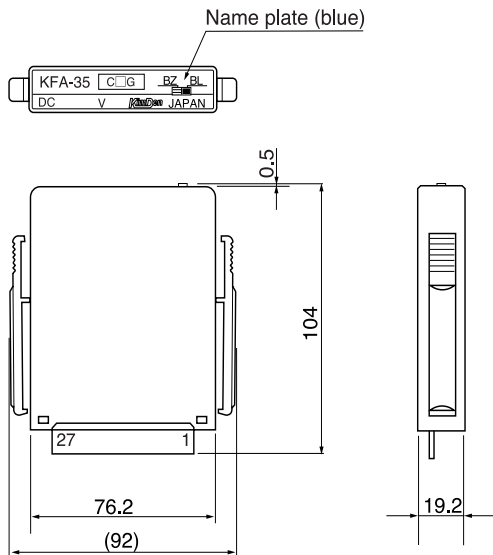
### ▼ KFA-34D, KFA-34G Chassis Unit



#### Panel Cut Dimensions



### ▼ KFA-35 Alarm Unit



### ▼ KFA-36 Common Unit

