

## - Alarm Circuit Example for PBA series -

### ■ Circuit

The example of connecting the alarm circuit of the PBA series is shown below.

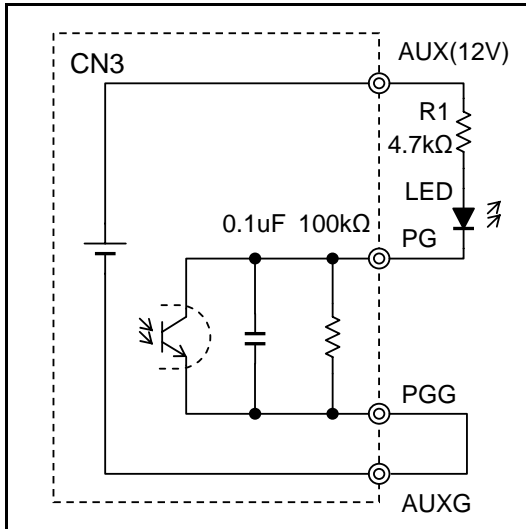


Fig 1 Alarm Circuit Example

### ■ Explanation of Operation

Table 1 PG alarm

Alarm	
PG	The PG gives "Low" signal during normal operation. If internal fan has stopped or output voltage has dropped below certain level or stopped due to activated protection circuit, PG gives "High" signal. <ul style="list-style-type: none"> <li>●Protection circuit;                             <ul style="list-style-type: none"> <li>Thermal protection</li> <li>Overvoltage protection</li> <li>Overcurrent protection</li> </ul> </li> </ul>
	Output of Alarm LED
	Good:LED ON (PG:Low) Bad :LED OFF (PG High)

### ■ Note

The purpose of PG alarm in PBA series is to see if unit is working correctly or not. Therefore, there is time delay to change to high level, and it depends on model and condition.

PBA300F / PBA600F

◆◆◆ less than 1 second

PBA1000F / PBA1500F/1500T

◆◆◆ less than 10 second

If the output voltage is turned off through a remote ON/OFF circuit, the PG gives "High" signal.

The PG signal may turn "High", if the output current becomes 10% or below of the rated current in parallel operation (in this case, the fan also stops).

If the output voltage is decreased to almost 0V or dropped rapidly through an external voltage adjustment when load is light, the PG signal may give "High".

The PG signal (Alarm) circuit is isolated from input, output, FG, RC and AUX.

## - Alarm Circuit Example for ACE series -

### ■ Circuit

The example of connecting the alarm circuit of the ACE series is shown below.

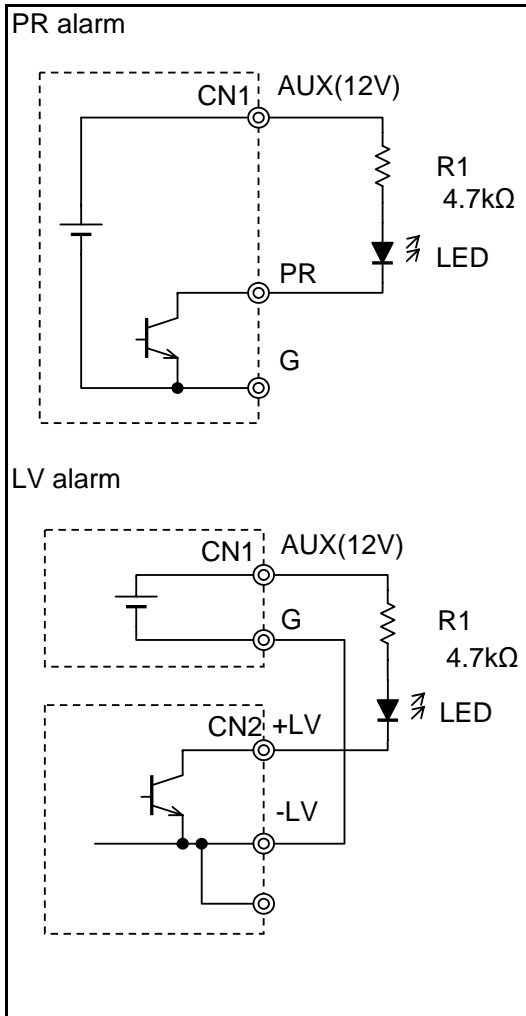


Fig 1 Alarm Circuit Example

### ■ Explanation of Operation

Table 1 PR alarm

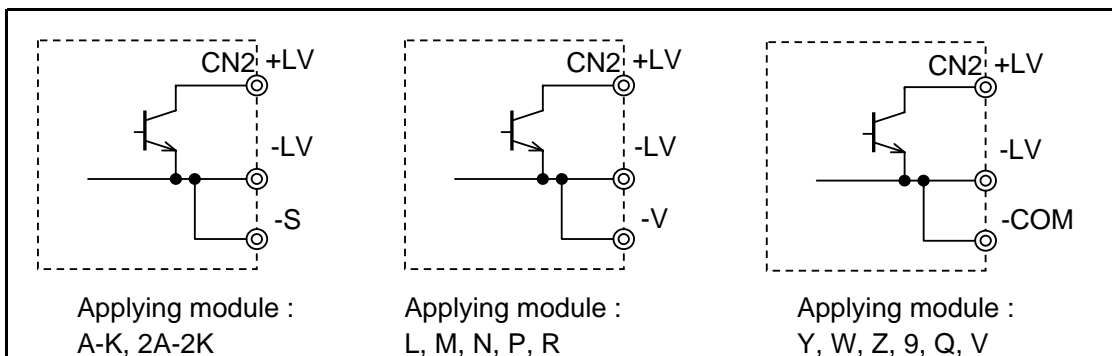
PR	Alarm
	When input voltage has failed (low input) or internal fan has stopped, the PR gives a TTL signal from CN1.
	Output of Alarm LED
	Good: LED ON (PR Low)
	Bad : LED OFF (PR High)

Table 2 LV alarm

LV	Alarm
	When output voltage has dropped than certain level, LV gives a TTL signal from CN2.
	Output of Alarm LED
	Good: LED ON (LV Low)
	Bad : LED OFF (LV High)

Terminals in CN1 (PR, AUX, G) are isolated from input, output, FG.

LV alarm circuit (+LV, -LV) are not isolated from output.



Applying module :  
A-K, 2A-2K

Applying module :  
L, M, N, P, R

Applying module :  
Y, W, Z, 9, Q, V

Fig 2 LV internal circuit

■ **Note**

AUX is available as voltage source for PR and LV alarm.  
 As far as each -V potential is the same, -LV can also be connected directly as Fig 3.  
 Please set the current of AUX to 0.1A or less.

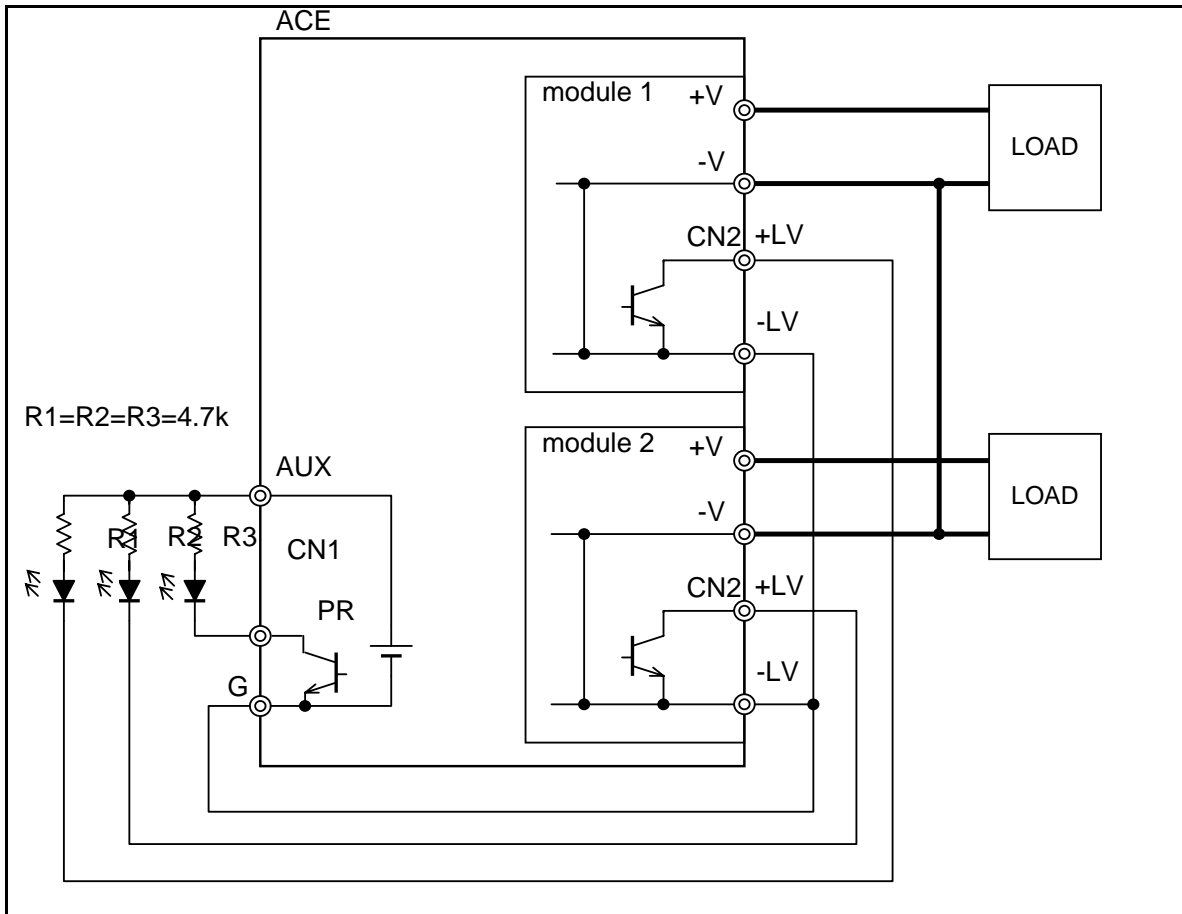


Fig 3 Alarm Circuit Example

Since LV circuit is not isolated from output, -LV can not be connected each other when each -V potential is not same, such as in series operation. In such a case, other voltage source that is isolated independently is required.

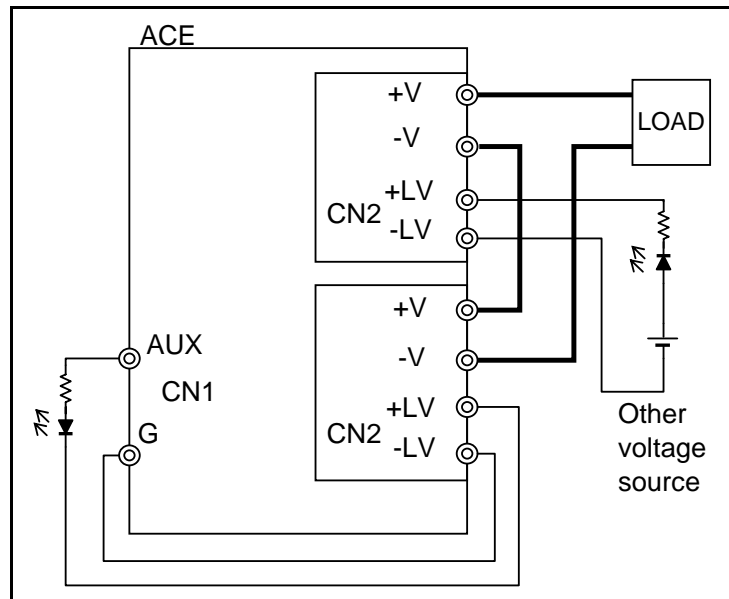


Fig 4 Alarm Circuit Example