

# FRS110

## Multiburner Control Flame Relay



The FRS110 FSG Relay is a flame safeguard control with a burner ignition control function, and can be used for batch operation combustion equipment with the FRS100 Flame Relay having the flame detecting function.

Ignition start is prevented when an abnormal condition exists on the flame relay or the FSG relay at start-up. The FSG relay has the function of safe shutoff of the fuel cut-off valve upon a flame failure signal from the safe start function during start-up or from the FRS100 flame relay during operation.

### Specifications

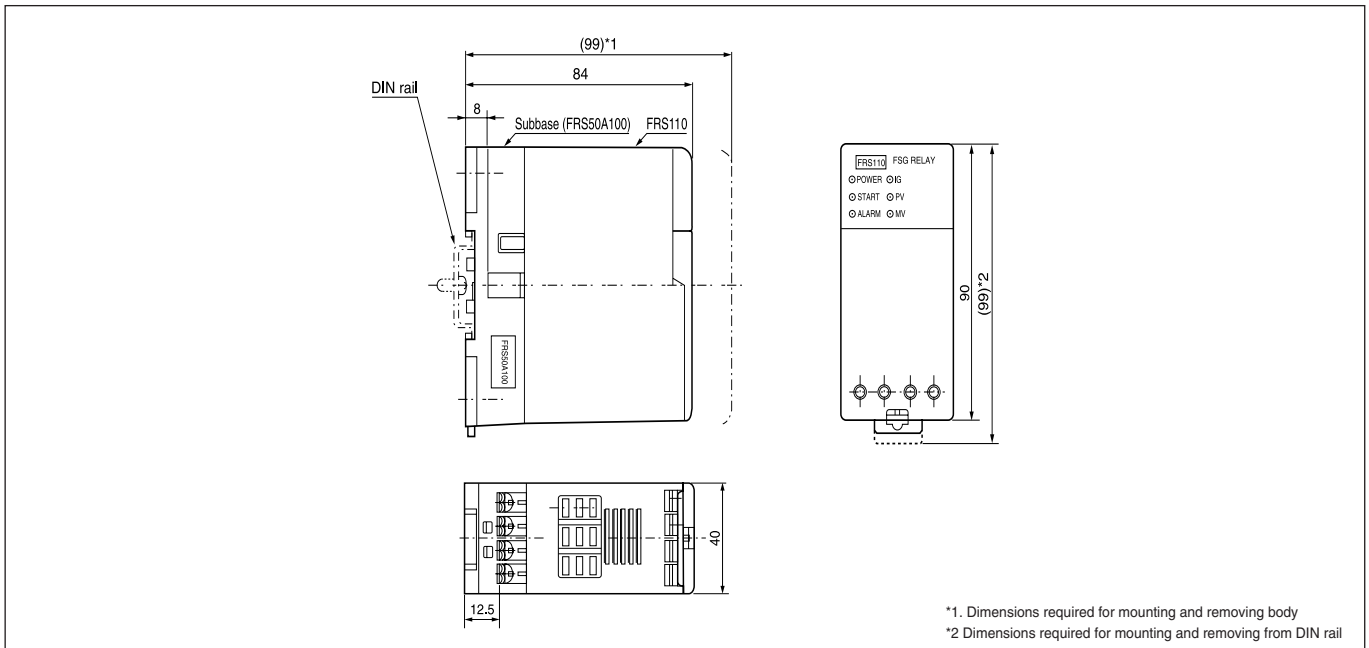
| Model No.                     | FRS110A100   | FRS110A104 | FRS110A200      | FRS110A204 |
|-------------------------------|--|------------|-----------------|------------|
| Power                         | 100Vac, 50/60Hz  |            | 200Vac, 50/60Hz |            |
| Power consumption             | 5.5W max.  |            |                 |            |
| Ignition waiting time         | 2s max.  |            |                 |            |
| Application                   | Batch operation of oil, gas or oil/gas mixed combustion equipment  |            |                 |            |
| Ignition trial timing         | 8 ± 2s   | 4 ± 1s     | 8 ± 2s          | 4 ± 1s     |
| Reset time                    | 1s max.  |            |                 |            |
| Upon flame failure            | Lockout  |            |                 |            |
| Ambient temperature           | One unit mount: -20 to +60°C<br>Gang mount: -20 to +45°C   |            |                 |            |
| Ambient humidity              | 90% RH max., 40°C (no condensation allowed)  |            |                 |            |
| Contact capacity              | Terminal 6 ignition transformer: 300VA<br>Terminal 3 double-pilot: 200VA<br>Terminal 7 main valve: 200VA |            |                 |            |
| Life                          | 100,000 operations (at room temperature/humidity and rated voltage)                                      |            |                 |            |
| Mounting                      | Mounted on DIN rail or screw mounted   |            |                 |            |
| Mass                          | FRS110A (main body): approx. 270g<br>FRS50A (subbase): approx. 70g                                       |            |                 |            |
| Accessories (sold separately) | FRS50A100: Mounting subbase<br>83968019-001: Lighting surge absorber                                     |            |                 |            |

### Selection Guide

| Model No.  | Description     |
|------------|-----------------|
| FRS110A100 | 100Vac, 50/60Hz |
| FRS110A104 | 100Vac, 50/60Hz |
| FRS110A200 | 200Vac, 50/60Hz |
| FRS110A204 | 200Vac, 50/60Hz |

### Dimensions

(Unit: mm)



\*1. Dimensions required for mounting and removing body  
\*2 Dimensions required for mounting and removing from DIN rail