Seismic Detector  S611

ELEVATOR CONTROL FOR SAFETY AND EARLY RECOVERY FROM EARTHQUAKE

OUTLINE
S611 is a seismic detector developed to specialize in elevator controls.
S611 is able to detect 3 kinds of seismic wave (Primary wave, low-Secondary wave, high-Secondary wave), and relay 3 kinds of contact-output to elevator controller.
S611 has selectable setting by rotary switch which gives easy installation and setting appropriate to each elevator at site.

FEATURES

**SIMPLE AND COMPACT**
Compact size is achieved in S611 by integrating a tri-axial acceleration sensor with a processor.

**INDEPENDENT OUTPUT**
3 independent contact-outputs after detecting seismic wave which corresponds to each preset value of acceleration against 3 kinds of waves, gives precise and appropriate control of elevators.

**EASY SETTING**
Using rotary switch, acceleration is selectable among 4 settings which are preset as default values when delivered.

**SELF CHECK FUNCTION**
Self-checking automatically starts at every power on. Error is reported to remote place by contact-output when abnormal condition detected.

**REMOTE OPERATION**
Reset and self-checking is controllable from a remote place.

Preset accelerations (Changeable before delivery)

<table>
<thead>
<tr>
<th>Switch No.</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>S LOW</td>
<td>80</td>
<td>100</td>
<td>120</td>
<td>200</td>
</tr>
<tr>
<td>S HIGH</td>
<td>120</td>
<td>120</td>
<td>150</td>
<td>300</td>
</tr>
</tbody>
</table>

TYPICAL FLOWCHART
*This flowchart depends on existing elevator control system

- [Detect P-wave] Relay contact output to elevator controller
- [Detect S-wave (LOW)] Relay contact output to elevator controller
- [Detect S-wave (HIGH)] Relay contact-output to manufacture
- [No S-wave] Restart by time-out

- Emergency stop at nearest floor
- Automatic restart
- Self-checking of elevator
- Maintenance by manufacture

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Specifications

Output relay contact | 4 contacts (elevator Control 3, error alert 1), (A contact)  
Output relay contact capacity | 0.5A @CD60V and AC60V, 2Ω  
Input signal | DC24V ± 20% (Non-polar), 2 contacts  
Physical switch | 2 switches (RESET, SELF TEST)  
Relay contact connector | MCL5/15-STF-3.5, Connectable conductor cross section 0.14 to 0.15mm²  
Sensor type | Capacitance  
Setting acceleration range | 2.5 to 500 gal (tri-axes: vertical axis, 2 horizontal axes)  
A/D conversion | Delta-sigma  
Resolution | 16bit  
Sampling rate | 100Hz  
Low pass filter | Butterworth filter (quartic), Cutoff frequency 5Hz (-3dB)  
High pass filter | Cutoff frequency 0.01Hz (-3dB)  
Power source | DC24V (normal), AC90 to 264V, 50/60Hz (optional)  
Power consumption | 9.5mA(Typical), 13mA(Maximum) @DC24V  
Size | W150 × H110 × D25mm  
Weight | 600g (Anchor including)  
Anchor bolt pitch | Anchor 150 × 150, Bolt pitch 130 × 130 φ10  
Material | Case: Flame retardant ABS  
| Anchor: Trivalent chromium plating iron  
Operating temperature and humidity | -10 to 50°C, 20 to 80% (Non-condensing)  

Function

| Relay contact-control reset function | Push physical reset switch. Or P reset and S LOW reset are controllable by remote. |
| Test function | Push physical test switch. Or 3 kinds of self-testing are executable by input signal durations. |
| Maintenance (sensor check) | Push both physical reset and test switch. |

Over view

CAUTION

- Read "Manual" ahead of the use to use it correctly and safely.  
- The specification and externals might change without a previous notice. Please acknowledge it beforehand.  
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