Safety switches

Emergency stop switches
The emergency stop switch (SG-E1 series) is equipped with push-to-lock and turn-to-reset functionality. For use as an emergency shutoff in the semiconductor industry, models adhering to SEMI standards (EMO) are also available.
- Push to lock, turn to reset
- Compatible with section 12.1 of the SEMI standards (S2 0706)

Grip switches
The grip switch (SG-C1 series) allows safe operation of a machine when the operator is present in a hazardous area. With three grip positions and multiple operating patterns, the grip switch can be used in many different applications.
- Solid tactile feedback
- Three switch positions
- Multiple operating patterns

Safety door switches / Key selector switches
These products feature key-based operation for worker protection in larger areas that could be hazardous. The safety door switch (SG-B2 series) and the key selector switch (SG-D1 series) can be used in tandem to add multiple layers of protection.
- One key operates both series
- Prevents workers from being trapped

Safety door switches
- SG-B1 series: Solenoid interlock with 5 built-in contacts;
- Low current consumption (110mA at 24V DC)
- SG-A1 series: 3 Built-In contacts
- Thin design (15mm thickness)
Safety control unit
SF-C21

Space-saving and easy to wire
- One SF-C21 can do the work of four safety relay units. Input: 10 points / Output: 8 points
- Compact size (height 97 mm × width 45 mm)

Absolutely no programming skills required
- Eight preset logics, safety-certified and compatible to control category 4 PLe
- The OFF delay time can be easily set by turning the rotary switch
- Password protection prevents inadvertent to the logic changes

Application-based customization
- Easy to create reliable safety circuit
- Configurator SF-C software to build own safety circuits

Easy to monitor status with a PLC
- Four auxiliary outputs are provided
- RS-485 communications (MODBUS RTU)

Please note: We also offer the safety control unit SF-C10 series, which is ideal for controlling Panasonic’s safety light curtain, because it’s connectors make wiring easier.

Specifications

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<th>Specification</th>
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<tr>
<td>Safety standards</td>
<td>IEC 61508-1 to 7, EN 61508-1 to 7(SIL3), ISO 13849-1 (up to Category 4, PLe), IEC 61131-2, IEC 61010-2-201, IEC 62061(SILCL3), UL 61010-1, UL 61010-2-201</td>
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<td>EMC standards</td>
<td>IEC 61000-6-2, IEC 61326-3-1, EN 55011</td>
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<td>Related standards</td>
<td>IEC 60947-1, IEC 60947-5-1, IEC 60947-5-2, IEC 60947-5-5, IEC 60947-5-8, IEC 61496-1, IEC TS 62046, ISO 13851</td>
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<tr>
<td>Safety input</td>
<td>2 × 4 inputs (ON - OFF max. 0.7ms; OFF - ON max. 10ms)</td>
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<td>Safety control output</td>
<td>PNP open-collector transistor with 2 outputs x 2 (ON - OFF max. 10ms; OFF - ON max. 100ms)</td>
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<td>Auxiliary output</td>
<td>PNP open-collector transistor with 1 output x 4</td>
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<td>Logic selection function</td>
<td>No. 0: Customization control, No. 2: Parallel muting control, No. 4: Partial stop control 1, No. 6: Two-hand control, No. 8: Operation mode selection control</td>
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<td>Communication</td>
<td>RS-485: Detachable spring-cage terminal block, USB: Mini-B male</td>
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