**SAFETY PRECAUTIONS**

**WARNING**

Warning notices are used to emphasize that improper operation may cause severe personal injury or death.

**CAUTION**

Caution notices are used where inattention might cause personal injury or damage to equipment.

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### Specifications and Ratings

<table>
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<tr>
<th>Type</th>
<th>Model No.</th>
<th>3 position switch</th>
<th>Emergency stop switch</th>
<th>Key selector switch</th>
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<tr>
<td>3 position switch</td>
<td>SG-C1-21-EG</td>
<td>Equipped</td>
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</table>

**Applicable Directives**

- Low Voltage Directive (2014/35/EU)
- EMC Directive (2014/30/EU)
- Electromagnetic Compatibility (EN 55011/EN 55024-2/EN 61000-4-11/EN 61000-4-2/EN 61000-4-3/EN 61000-4-4/EN 61000-4-5/EN 61000-4-6/EN 61000-4-9/EN 61000-4-11/EN 61000-4-12/EN 61000-4-14/EN 61000-4-16)
- EN ISO 11306, EN ISO 11307, EN ISO 11308

### Dimensions (mm)

- Type: SG-C1-21
- Type: SG-C1-21-EMK
- Type: SG-C1-21-EG

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**Notes for Operation**

- **SG-C1-21** series is a device used for exchanging a machine index, etc. when teaching the function of a machine in a hazardous area manually. Conditioning the servo axis so that the machine can operate safely (in Safe Mode) is a function to activate the safety system.

- In order to ensure safety of the control system, connect each pair of the 3 position enabling switch (terminal No. NO1-C1 and NO2-C2) to a disengagement circuitry such as a safety relay or module. (ISO 13849-1)

- The rubber boot is made of silicone rubber.

- The terminal is made of iron. When cleaning the SG-C1-21 series, use a detergent compatible with the materials.

- Do not press the rubber boot with excessive pressure to an inappropriate direction.

- For momentary pushbutton switches, a key selector switch with control unit does not get contact with NO1 and the contacts of a microswitch to different voltages or different power sources are not connected in parallel.

- Do not operate key selector switch of additional control unit without completely inserting the key.

- The rubber boot may deteriorate depending on the operating environment and conditions.

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**Specifications and Ratings**

- Type: SG-C1-21
- Type: SG-C1-21-EMK
- Type: SG-C1-21-EG

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**Wiring**

- Connecting the power to the SG-C1-21 series before starting installation, removal, wiring, and manufacturing. It is dangerous to handle live electrical circuits of the machine. Do not disassemble or modify the switch.

- Do not attempt to disassemble or modify the switch. Otherwise, a breakdown or failure may occur. When using the SG-C1-21 series for safety-related equipment in a control system, refer to the safety standards and regulations regarding the applicable machine in the proper use of the actual machines and installations to make sure of correct operation. Also, perform regular maintenance and inspection of the safety-related equipment in short cycle operations.

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**Recommended screw tightening torque**

- Use a cable gland of IP67 or higher protection.

- Use the connector with the specification below when replacing a connector included with grip style 3 position enabling switch.

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**Precaution for Disposal**

Disposal of SG-C1-21 series as an industrial waste.

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**Instruction Manual**

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For more information, please visit our website:

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