

# SGEL108/106CV

**Dustproof**



RoHS Compliant

## Speed Controllable Trigger Switches for AC Power



With Variable Speed Control

### ■ Features

- 1. High-Current Trigger Switch With Speed Controller**  
High current, compact trigger switch with speed control circuit for AC power.
- 2. Junction Terminal For Easy Wiring**  
Junction terminals and terminals for noise canceller capacitor are also provided, which makes wiring work easy and simple.
- 3. Variable Speed Control**  
Available with or without speed adjustment knob.
- 4. For 100 VAC and 200 VAC**  
100~130 VAC and 220 V~240 VAC (50/60 Hz) are available to comply with the different voltage requirements of each countries throughout the world.
- 5. Dustproof**  
The switch has no openings which assures excellent protection against dust.
- 6. High Reliability**  
The sliding contact mechanism (wipe mechanism) assures high contact reliability.
- 7. UL Recognized, CSA Certified**

### ■ Common Specifications

Rating	<b>108CV</b> type	8A 125V AC (Resistive or inductive load)
	<b>106CV</b> type	6A 250V AC (Resistive or inductive load)
Dielectric strength	2,000VAC 1 minute	
Insulation resistance	100MΩ min. (500VDC)	
Electrical life	50,000 operations <b>108CV</b> type : 125VAC 48/8A P.f. 0.6/0.9 <b>106CV</b> type : 250VAC 36/6A P.f. 0.6/0.9	
Operating force	11.8~24.5N	
Operating temperature range	-10~+65°C	
Storage temperature range	-20~+80°C	

### ■ Part Numbering

<b>SG</b>	<b>E</b>	<b>L</b>	<b>108CV</b>	—	<b>A</b>	—	<b>Z</b>												
Series code	Dustproof	Lock mechanism	Applicable voltage range		Actuator shape														
		<table border="1" style="margin: auto;"> <tr> <td>None</td> <td>Without</td> </tr> <tr> <td><b>L</b></td> <td>With</td> </tr> </table>	None	Without	<b>L</b>	With	<table border="1" style="margin: auto;"> <tr> <td><b>108CV</b></td> <td>AC100~AC130V</td> </tr> <tr> <td><b>106CV</b></td> <td>AC220~AC240V</td> </tr> </table>	<b>108CV</b>	AC100~AC130V	<b>106CV</b>	AC220~AC240V		<table border="1" style="margin: auto;"> <tr> <td>None</td> <td>Standard type</td> </tr> <tr> <td><b>A</b></td> <td>With speed adjustment knob</td> </tr> </table>	None	Standard type	<b>A</b>	With speed adjustment knob		
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<b>106CV</b>	AC220~AC240V																		
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<b>A</b>	With speed adjustment knob																		

※ It is all an inquiry product. Please consult us for ordering.

**Table of Part Numbers**

Speed adjustment knob	Applicable voltage range	Standard type	
		Without lock mechanism	With lock mechanism
Without	AC100V~130V	SGE108CV-Z	—
	AC220V~240V	—	—
With	AC100V~130V	SGE108CV-A-Z	SGEL108CV-A-Z
	AC220V~240V	SGE106CV-A-Z	SGEL106CV-A-Z

**Thyristor Specifications**

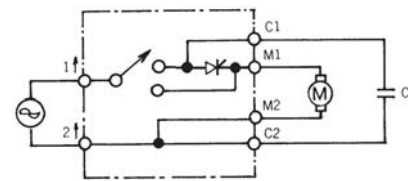
$I_T(AV)$	サITSM	$V_{RRM}$
8A	120A	600V

UL recognized / CSA certified.

**Circuit Diagram**

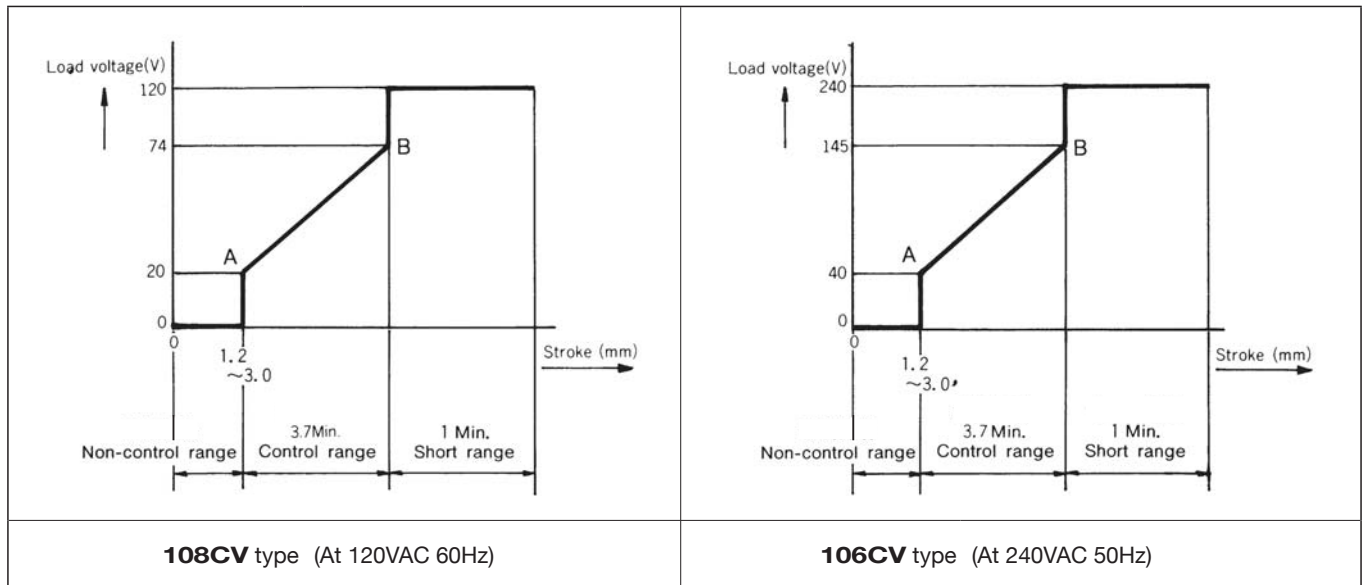
Trigger position A	Control range (From A pos. 1.2~7.3mm)	Short range (From A pos. 7.3~9.2mm)	Circuit diagram
OFF	ON	ON	
—			

**Wiring Diagram**



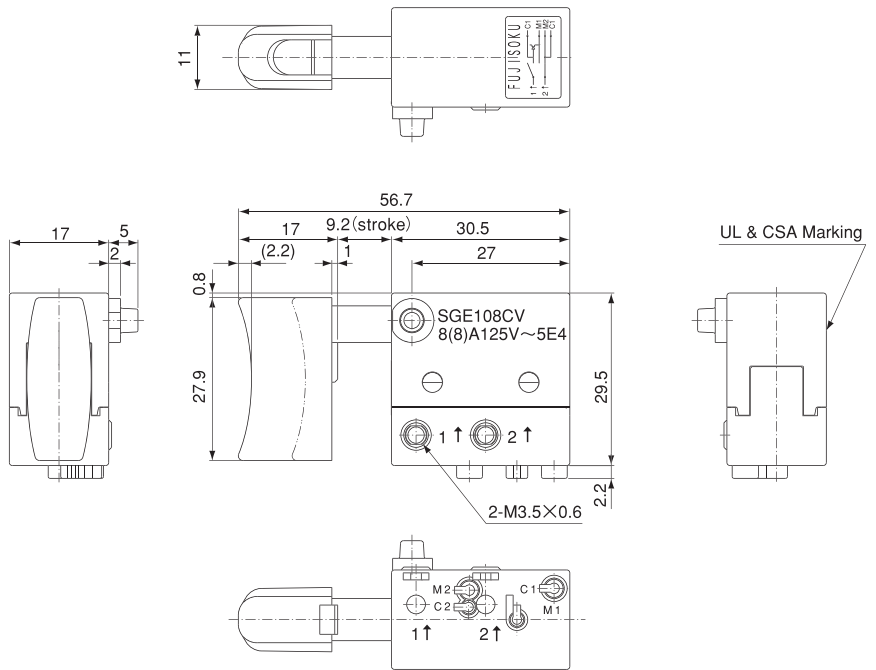
1↑ · 2↑ : Terminals for power source  
 C1 · C2 : Terminals for capacitor  
 M1 · M2 : Terminals for motor load

**Control Characteristics**



SGE108CV-Z

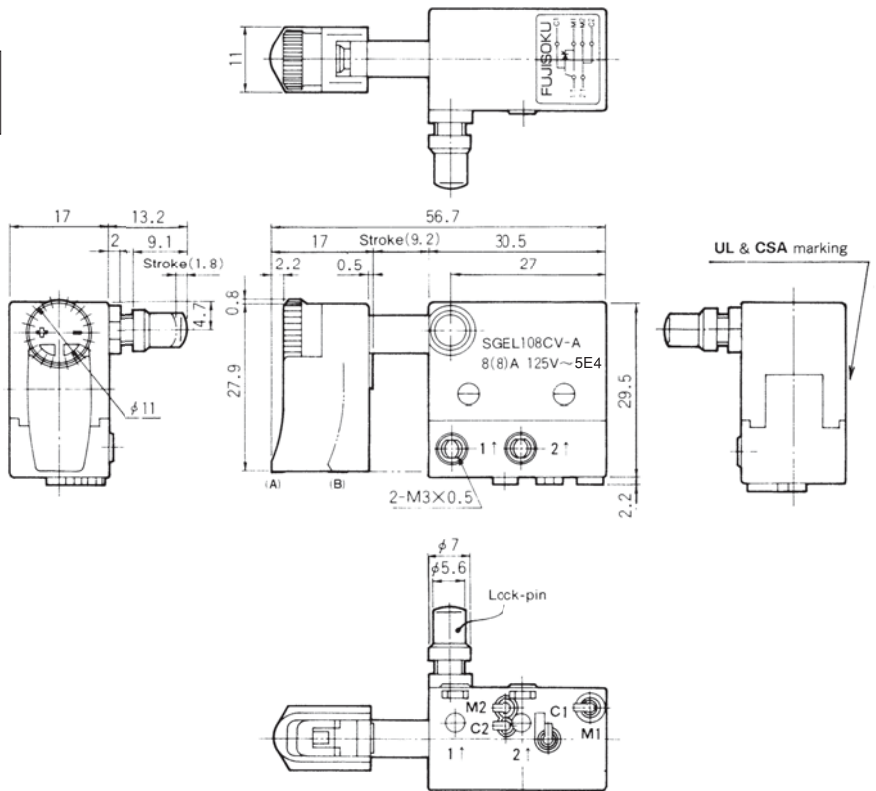
Standard type



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SGEL108/106CV-A-Z

With Speed Adjustment Knob



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## ■ Customizations

- Customization of colors, shapes, etc. of the trigger, knob, lever, etc. are available.

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## ■ Precautions

1. Tightening torque for the terminal screw.  
: 58.8N · cm max.
2. Lead Wire
  - (1) Terminal portion for the motor load and power source.  
(1 ↑ · 2 ↑ · M1 · M2)  
: AWG18 (Dia of covered wire = 3 mm max.)
  - (2) Terminal portion for the capacitor. (C1 · C2)  
: AWG20~24 (Dia of covered wire = 2 mm max.)
  - (3) Wire stripping  
: 8~8.5 mm